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1439




REVIEW
OF
ACTIVITIES
1963

INCLUDING
15TH ANNUAL REPORT
≡



[Canada]

11
CANADIAN PATENTS AND DEVELOPMENT
LIMITED



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REVIEW
OF
ACTIVITIES
1963
ANNUAL REPORT

CANADIAN PATENTS AND DEVELOPMENT
LIMITED



REVIEW
OF
ACTIVITIES
1963

INCLUDING
15TH ANNUAL REPORT

CANADIAN PATENTS AND DEVELOPMENT
LIMITED

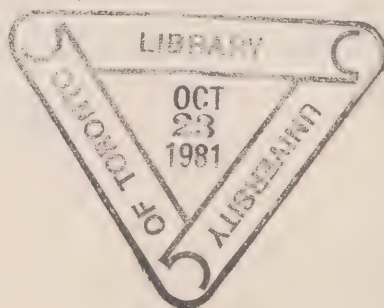
DIRECTORS

- B. G. Ballard President,
National Research Council,
Ottawa, Canada
- E. R. Birchard¹ Burlington, Ontario
- Marc Boyer² Deputy Minister, Department of
Mines and Technical Surveys,
Ottawa, Canada
- R. E. Jamieson McGill University,
Montreal, Quebec
- C. J. Mackenzie Ottawa, Canada
- F. L. W. McKim Director, Division of
Administration and Awards,
National Research Council,
Ottawa, Canada
- F. T. Rosser Vice-President (Administration),
National Research Council,
Ottawa, Canada
- E. W. R. Steacie³ President, National Research
Council, Ottawa, Canada
- W. E. van Steenburgh ... Deputy Minister, Department of
Mines and Technical Surveys,
Ottawa, Canada
- F. C. Wallace President, Smith and Stone
Limited, Toronto, Ontario
- A. H. Zimmerman Chairman, Defence Research Board,
Ottawa, Canada

¹ Died January 6, 1963.

² Died November 8, 1962.

³ Died August 28, 1962.



OFFICERS

President	F. T. Rosser
Vice-President	Marc Boyer ¹
Secretary-Treasurer	F. R. Charles
Manager	J. R. Johnson

STAFF DIRECTORY

Patent Officers	J. R. Hughes
.....	A. A. Thomson
Promotional Officer	K. G. Lund
Accounts Officer	K. R. Paul
Administrative Officer	L. Lipke

Auditor

The Auditor General

Bankers

The Canadian Imperial
Bank of Commerce

Head Office:

National Research Council Building,
Sussex Drive, Ottawa, Canada¹ Died November 8, 1962.

PRESIDENT'S LETTER

May 17th, 1963

The Honourable C. M. Drury,
Chairman of the Committee of the
Privy Council on Scientific
and Industrial Research,
Ottawa.

Sir:

In accordance with Section 85(3) of the Financial Administration Act, I have the honour to present to you on behalf of the Board of Directors, the Fifteenth Annual Report of Canadian Patents and Development Limited for the year ended March 31st, 1963, together with the financial statements and the Report of the Auditor General, following his examination of the Company's accounts.

Canadian Patents and Development Limited is a subsidiary company of the National Research Council of Canada, incorporated in 1947 as a private company under Part I of the Companies Act, 1934. Under the direction of the National Research Council, the Company is responsible for patenting and exploiting commercial inventions originating in the laboratories of the Council. Under the Public Servants Inventions Act, the Company may patent and exploit any inventions referred to it from the research establishments of Federal Government departments. In addition, as directed, the Company has contracted to handle the inventions of twelve Canadian universities and five provincial research councils. Although the Company operates widely in the field of public research institutions, it does not deal with the inventive talent of individual citizens.

The Company's business has continued to grow steadily. The number of active inventions now held by the Company exceeds 750. Some 164 of these are licensed to industrial organizations throughout the world, with Canadian industry holding 72.5% of them.

The invention windfalls that bring in large revenues are very rare indeed and often short lived. The profit which is shown for this year may be attributed to the revenue from one license alone. However, the diversity of the inventions recently licensed by the Company tends to stabilize the financial position since many of the new licenses contain provisions for minimum annual payments. Even without a windfall, the Company would be able to meet its obligations and, with one, development work is made possible. The results of recent exploitation and promotion have been encouraging; approximately 96% of the Company's royalty income this year was derived from licenses which were completed since 1955.

It is apparent that Canadian industry is becoming more interested in producing high quality, sophisticated equipment for which the main market is in foreign countries. The Company is now licensing, for production in Canada, many inventions which, a few years ago, could have been licensed only abroad.

This year the Company resumed its assistance to industry in establishing new industrial processes in Canada. This development program got under way more slowly than had been expected but the Company is now studying the possibility of doing development work on such projects as ore treatment and design of surgical instruments and office machinery.

The operating budget for the ensuing year has been approved by the Chairman of the Privy Council Committee on Scientific and Industrial Research and the Minister of Finance in accordance with the Financial Administration Act.

It is with regret that we record the deaths of Dr. Marc Boyer, Vice-President of the Company, and of two of the Company's Directors, Dr. E. W. R. Steacie, President of the National Research Council, and Dr. E. R. Birchard, the Company's first President, who contributed so greatly to its organization and growth.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "F. T. Rosser". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

F. T. Rosser,
President.

AUDITOR GENERAL'S OFFICE

Ottawa, May 13, 1963.

The Honourable Charles Mills Drury,
Chairman of the Committee of the
Privy Council on Scientific and
Industrial Research,
Ottawa.

Sir:

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1963. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year, and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,
A. M. Henderson,
Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Companies Act)

BALANCE SHEET AS AT MARCH 31, 1963
(with comparative figures as at March 31, 1962)

<u>ASSETS</u>		<u>1963</u>	<u>1962</u>
Cash		\$ 36,270	\$ 18,209
Accounts receivable	\$169,837		108,131
Less: Provision for doubtful accounts	<u>6,600</u>		<u>6,600</u>
		163,237	<u>101,531</u>
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value, March 31, 1963, \$639,880; March 31, 1962, \$386,013)	651,073		394,198
Add: Accrued interest	<u>8,816</u>		<u>3,818</u>
		659,889	<u>398,016</u>
		<u>859,396</u>	<u>517,756</u>
<u>LIABILITIES</u>		<u>1963</u>	<u>1962</u>
Accounts payable		39,636	59,459
Royalties paid in advance		-	4,815
Capital:			
Capital stock:			
Authorized - 10,000 shares of no par value			
Issued - 5,000 shares, fully paid		296,199	296,199
Surplus			
Balance as at April 1, 1962	\$157,283		
Add: Net profit for the year, per Statement of Income and Expense	<u>366,278</u>		
		<u>523,561</u>	<u>157,283</u>
Balance as at March 31, 1963		<u>819,760</u>	<u>453,482</u>
		<u>859,396</u>	<u>517,756</u>

Note

The Company had outstanding commitments amounting to approximately \$32,000 as at March 31, 1963, in respect of a development program.

Approved on behalf of the Board -- F. T. Rosser, Director
F. L. W. McKim, Director

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of May 13, 1963, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

A. M. Henderson
Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED

STATEMENT OF INCOME AND EXPENSE
FOR THE YEAR ENDED MARCH 31, 1963

(with comparative figures for the year ended March 31, 1962)

	<u>1963</u>	<u>1962</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$553, 972	\$277, 329
Less: costs of licensing rights and related technical assistance, etc.	<u>62, 782</u>	<u>12, 168</u>
	491, 190	265, 161
Income from agency agreements	2, 915	3, 457
Interest earned	20, 773	10, 081
Miscellaneous income	<u>186</u>	<u>948</u>
	515, 064	279, 647
<u>Expense</u>		
Services provided by National Research Council	36, 000	30, 000
Salaries	28, 801	26, 879
Patent attorneys' fees and other patent expense	55, 058	33, 473
Awards to inventors	18, 640	13, 810
Provision for doubtful accounts	-	100
Promotion and development	6, 790	28, 903
Travel	2, 108	2, 846
Miscellaneous	<u>1, 389</u>	<u>1, 315</u>
	<u>148, 786</u>	<u>137, 326</u>
Net Profit	<u>366, 278</u>	<u>142, 321</u>

Note: Salaries for the year 1963
include directors' fees, \$200 (\$150).

GENERAL REPORT

Canadian Patents and Development Limited handles patent matters for the National Research Council, does work for twenty-two government departments and agencies and seventeen Canadian universities and provincial research establishments, and has agreements for exchange of patents and promotional effort with similar organizations in four Commonwealth countries.

The portfolio of patents is growing steadily and at the present time the Company owns or controls 893 Canadian patents, 384 American patents, and 283 in other countries throughout the world. There are 546 patent applications pending, of which 195 are in Canada, 134 in the United States, and 217 in other countries.

During the year the Company processed for patentability or exploitation, 67 inventions from the laboratories of the National Research Council, 59 from various government departments and agencies, 20 from other Canadian organizations, and 9 by reference from Commonwealth sources.

Although the Company's work is largely for the National Research Council and Federal Government departments and agencies, its services to Canadian universities and provincial research institutions are increasing. At March 31st 1963, contracts had been made with the following institutions:

Universities -

- University of British Columbia
- Dalhousie University
- Ecole Polytechnique
- Laval University
- University of Manitoba
- McGill University
- McMaster University
- Queen's University
- St. Francis Xavier University

University of Saskatchewan
 University of Waterloo
 University of Western Ontario

Other Organizations -

Research Council of Alberta
 British Columbia Research Council
 Saskatchewan Research Council
 Agricultural Research Institute of Ontario
 Ontario Research Foundation

Invention disclosures from these organizations are evaluated for both commercial and patentability prospects. If the Company considers an invention sufficiently promising to proceed with patent protection, it bears all patent prosecution costs and handles the promotion and licensing of the patent. When an invention becomes revenue-producing the Company is able to recover its out-of-pocket expenses before dividing the remaining royalties with the originating organization. To date the Company has received 131 inventions from contractors, 24 of which have either been patented or have patents pending, and 7 have been licensed.

The revenue from licenses has varied widely, from \$22,000 in the year 1952-53 to \$491,190 in 1962-63 but for the past three years it has been increasing rapidly. During the past 15 years the Company has received more than \$1,700,000 in royalties and licensing fees. Most of this revenue is from just a few inventions, but a large number of inventions have contributed to the total.

<u>Inventions</u>	<u>Revenue</u>
1	In excess of \$600,000
1	In excess of \$350,000
4	In excess of \$ 50,000
13	In excess of \$ 10,000
84	Less than \$ 10,000

The increased revenue during the past three years has enabled the Company to undertake again an active development program, and every effort will be made to expand this during the ensuing year. The diagram on page 16 shows the financial position of the Company for the past 15 years.

PATENTS

A total of 113 new cases was received by the Patent Section for patent assessment. Although this figure is almost the same as in the previous year, the number of cases filed (46) was greater. Thirteen of the cases were prepared and filed by the officers of the Section acting as patent agents.

Certain features of the Patent Section's activities are summarized in the diagram on page 17. This shows not only the total number of cases but also a breakdown of the various sources from which the Company received patent proposals for assessment. In 1962-63 approximately 58% of the new cases were received from the National Research Council; 17% from Atomic Energy of Canada Limited; 7% from other government departments; and 18% from provincial research organizations and universities with which the Company has patent agreements.

PROMOTION

In 1962-63 the number of new cases received from the Patent Section and all other sources totalled 84. A small number of older patents expired and some of the inventions handled for the National Research Development Corporation of England were declared obsolete. The Company's holdings are summarized in the Table on pages 18 and 19.

During the year, 25 agreements covering 45 inventions were completed. The bar diagram on page 20

shows the agreements in effect at the end of each fiscal year to 1962 and the agreements terminated. The termination of agreements began in 1955 and the total number of terminations continues to increase as the older inventions become obsolete or the patents expire. Agreements on new inventions replace those terminated and there is a small net increase in the number of agreements in effect. The number of licenses under negotiation at the end of the year indicates that the trend will continue.

Other features of the year's activities were gratifying. The distribution list for the Patents Handbook grew steadily. The Company presented exhibits at the Design Engineering Show, the Chemical Institute of Canada meeting in Edmonton and the first Canadian Chemical and Equipment Exhibition. Chemical products and equipment were shown for the first time by the Company and the results were encouraging. Many technical periodicals both in Canada and abroad continued to request material for publication; this form of publicity is particularly valuable.

When it began operations in 1948, the Company received from the National Research Council a portfolio of 46 inventions, and the first issue of the Patents Handbook in 1949 listed 40 inventions. The diagram on page 21 shows the steady growth in the number of inventions over the years. This growth is interesting for it has remained uniform in spite of the facts that large blocks of inventions originating at Orenda Engines Limited and Atomic Energy of Canada Limited were turned over to the Company in short periods of time and that the supply of inventions from various sources fluctuated widely.

The inventions received for exploitation are of two types. The first are received as ideas which are evaluated from a commercial and patent standpoint before patent applications are filed. These originate in such organizations as the National Research Council, government departments, and universities. Those of the second type are received as inventions on which patent applications have already been filed or on which the decision to file has been made by others. These inventions are usually patented for bargaining and protection purposes rather than for commercial

value, and they originate in such organizations as the Department of National Defence and Atomic Energy of Canada Limited. For example, one group of approximately 400 Canadian patents acquired by Atomic Energy of Canada Limited under an exchange agreement is held for possible commercial use but is listed as one item in the Patents Handbook.

At present, the Company has a list of 759 active cases, of which 55 were received from foreign associates. Patent applications for commercial purposes have been filed on 266 Canadian inventions. Of these 112 (42%) have been licensed, several to more than one company. The licensing ratio for the purely protection type of invention is 5.3%. These results emphasize the value of the Company's policy of considering carefully the commercial values of inventions before filing patent applications. However, it should be noted that two of the Company's largest money earners to date were from the protection patent group, a fact emphasizing that inventions are extremely variable and cannot be measured and counted in the same way as products in an industry. Careful management can reduce the chances of loss and promote the potential money earners but the spectacular gains from an invention are always unpredictable.

Some Active Cases

Dehydrated Foods - Development of the market for the whole group of dehydrated foods was retarded during the year by legal actions relating to the instant potato product. However, despite this, production is increasing in Canada and licensing is going ahead abroad. Larger quantities of some of the composite foods will shortly be available from pilot plant experiments and this increase should accelerate assessment of these products.

Agglomeration Process - Work has continued in the laboratory on several possible uses for the process. Two of these now seem to be commercially attractive. A variation of the process may result in a new economical treatment for tar sands.

Perforated Breakwater - The first breakwater of this design was completed at Baie Comeau during the year. Its effect to date has been good and could lead to its use in many countries.

Vaccines - A new process for the production of polyvalent somatic antigen vaccines has created international interest and licenses are under negotiation.

Inclined Settler - A device that has been available for many years found application in a new electrolytic machining industry after display of a working model at an exhibition in Chicago. The licensee plans to develop other uses.

Coulometric Device - This is a new device which measures the amount of energy withdrawn from a battery and indicates the time at which the same amount has been replaced. It may be useful for control of battery chargers, particularly when it is used with sealed cells in which overcharging causes serious troubles.

DEVELOPMENT

Development activities of the Company progressed slowly during the year. Funds were provided for four programs, and negotiations are well along for two others of appreciable size. Inventions that have easily assessed potential and can be developed with small funds are usually taken up readily by industry. The rest require very careful study for assessment of their potential and often require the expenditure of large sums for development.

Assistance

Densimeter - This instrument, which measures density of fluids intermittently or continuously, may have application in automatic process control. The equipment is being developed under a contract with Hydrad Scientific and Technical Company.

Plating Process - This is a process for plating nickel directly on aluminum. Good results have been obtained in the laboratory but have not been duplicated in industrial trials. Canadian Arsenals Limited is undertaking a critical examination of the process to evaluate its commercial potential.

Vascular Suturing Instruments - A number of instruments is required for larger-scale surgical evaluation and the Company is providing ten of them. Additional development is required for ancillary equipment, and arrangements are under way for this work. Several associated development projects will likely be required.

Core Yarn - A process for spinning multiple-core yarn has been licensed in Europe for some time but is still under study in Canada and the United States. The services of a technical consultant have been provided to several prospective licensees.

Prospects

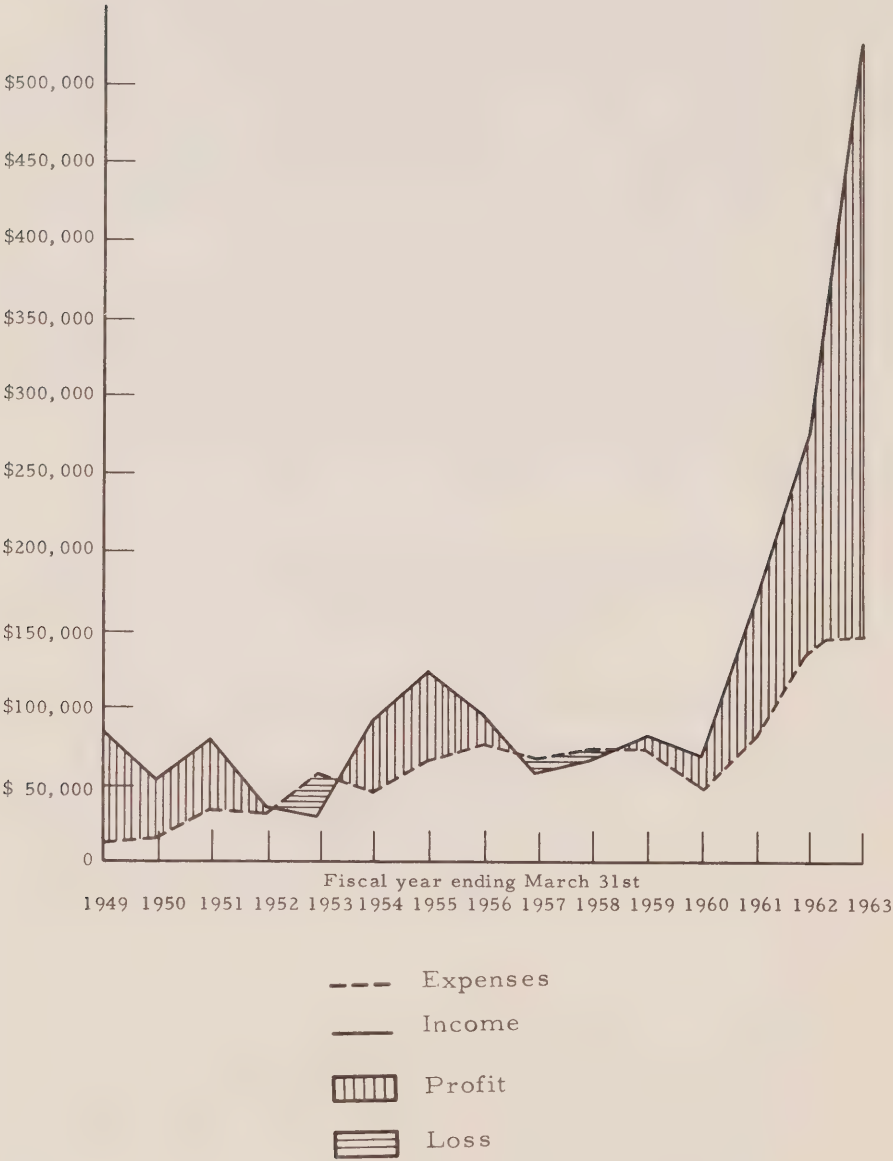
Agglomeration Process - Many possible applications of this process have been investigated in the laboratory. It now appears that one application to the ore-dressing field may be practical, and pilot plant investigations could be undertaken. Other applications of the same process may lead to further development work.

Staple-Forming and -Loading Machine - The usefulness of the vascular suturing instrument is limited by the difficulty of forming staples and loading them into the instrument by hand. Development to design and construct a machine to carry out these operations is required.

Punch Card Time Clock - A time clock developed by the Post Office Department punches time directly onto punch cards, eliminating the usual operation of calculating elapsed times and transferring this time to punch cards. One company is seriously considering production of such machines and may need assistance in the development of a pilot model.

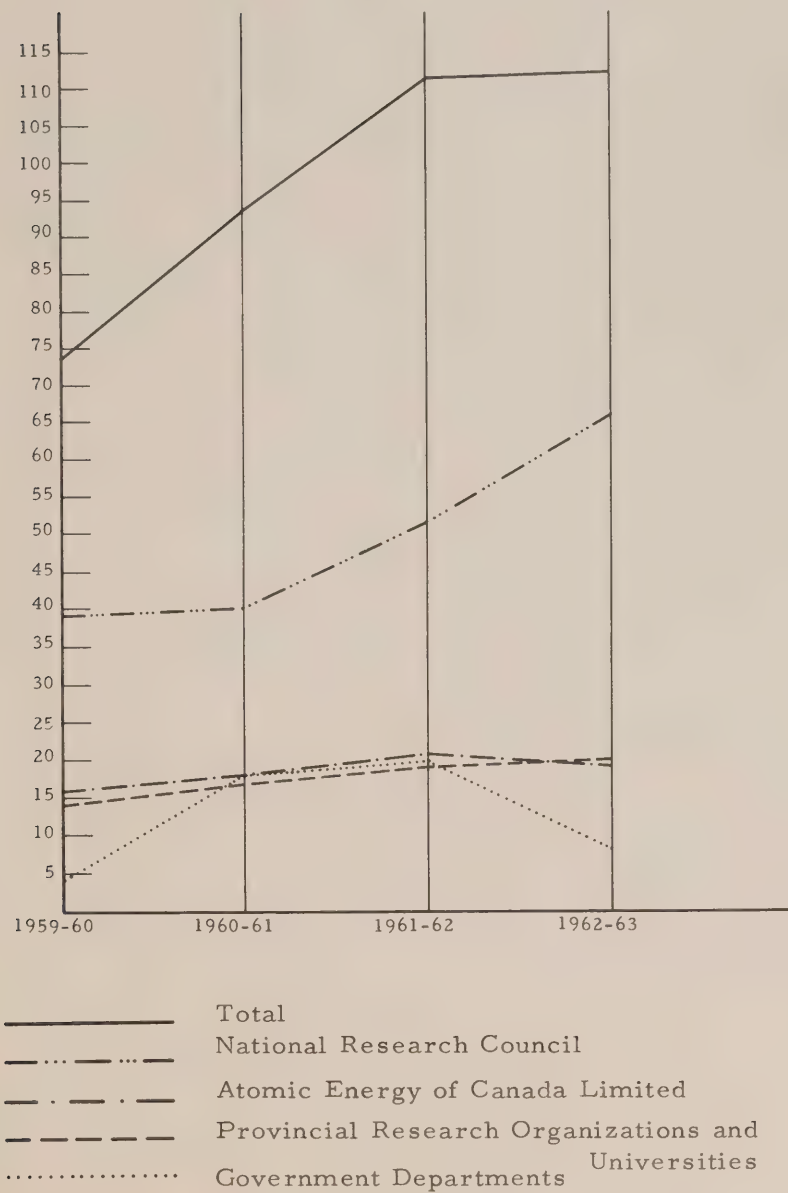
REVIEW OF ACTIVITIES
STATISTICS

STATEMENT OF INCOME AND EXPENSE



STATISTICS

PATENT PROPOSALS INVESTIGATED
BY PATENT SECTION



STATISTICS

SUMMARY OF PROMOTIONAL ACTIVITIES

Source	1962-63			Cumulative Totals		
	New cases received	Released for exploitation	Licensed	Received	Presently active	Licensed
National Research Council	67	36	21	657	244	144
Atomic Energy of Canada Limited	22	8	3	311	150	9
Department of National Defence	28	26	17	155	123	36
Department of Veterans' Affairs	1	-	-	35	2	-
Department of Agriculture	1	-	4	20	8	9
Post Office Department	1	-	-	38	11	-
Department of Fisheries	1	-	-	16	6	6
Department of National Health and Welfare	1	1	-	9	3	-
Department of Northern Affairs	-	-	-	1	-	-
Department of National Revenue	-	-	-	1	-	-
Department of Transport	-	-	-	4	-	-
Department of Mines and Technical Surveys	1	-	-	11	-	-
National Film Board	-	-	-	3	1	1
Department of Forestry	1	-	-	4	2	1
Department of Justice	2	-	-	4	-	-
Department of Public Works	-	-	-	1	-	-
Department of Trade and Commerce	-	-	-	2	-	-
Canadian Patent Office	-	-	-	1	-	-
Canadian Arsenals	-	-	-	2	1	-
Central Mortgage and Housing Corporation	-	-	-	1	1	-
Department of Defence Production	-	-	-	146	127	-
Department of Labour	-	-	-	1	-	-
Eldorado Mining and Smelting Company Limited	-	-	-	1	-	-

STATISTICS

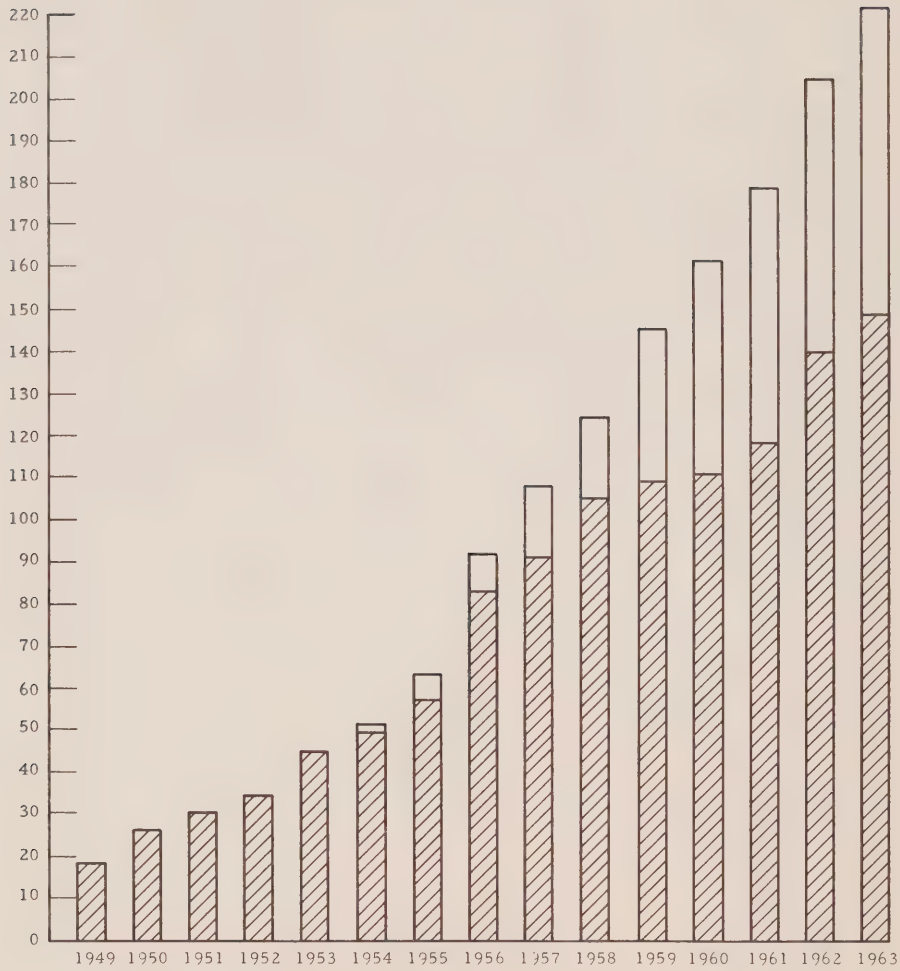
SUMMARY OF PROMOTIONAL ACTIVITIES (cont'd)

	1962-63			Cumulative Totals		
	New cases received	Released for exploitation	Licensed	Received	Presently active	Licensed
University of Alberta	-	-	-	5	-	-
University of British Columbia	2	2	-	34	10	2
University of Saskatchewan	3	-	-	12	1	-
University of Manitoba	2	-	-	9	-	-
University of Western Ontario	3	-	-	14	3	3
Queen's University	-	-	-	2	1	-
McGill University	2	1	-	7	1	-
Dalhousie University	-	-	-	3	1	-
Laval University	-	-	-	3	1	-
Ecole Polytechnique	-	-	-	2	-	-
University of Montreal	-	-	-	6	-	-
McMaster University	1	-	-	1	-	-
University of Waterloo	1	-	-	1	-	-
Nova Scotia Technical College	1	-	-	1	-	-
Ontario Agricultural Research Institute	1	-	-	1	-	-
British Columbia Research Council	-	-	-	9	2	2
Research Council of Alberta	2	2	-	20	4	-
Saskatchewan Research Council	2	-	-	9	-	-
Ontario Research Foundation	-	-	-	1	1	-
N. R. D. C. England	7	7	-	109	50	1
N. R. D. C. India	1	1	-	3	3	-
C. S. I. R. O. Australia	-	-	-	8	2	1
D. S. I. R. New Zealand	1	-	-	1	-	-
	155	84	45	1685	759	215


REVIEW OF ACTIVITIES


STATISTICS

LICENSE AGREEMENTS



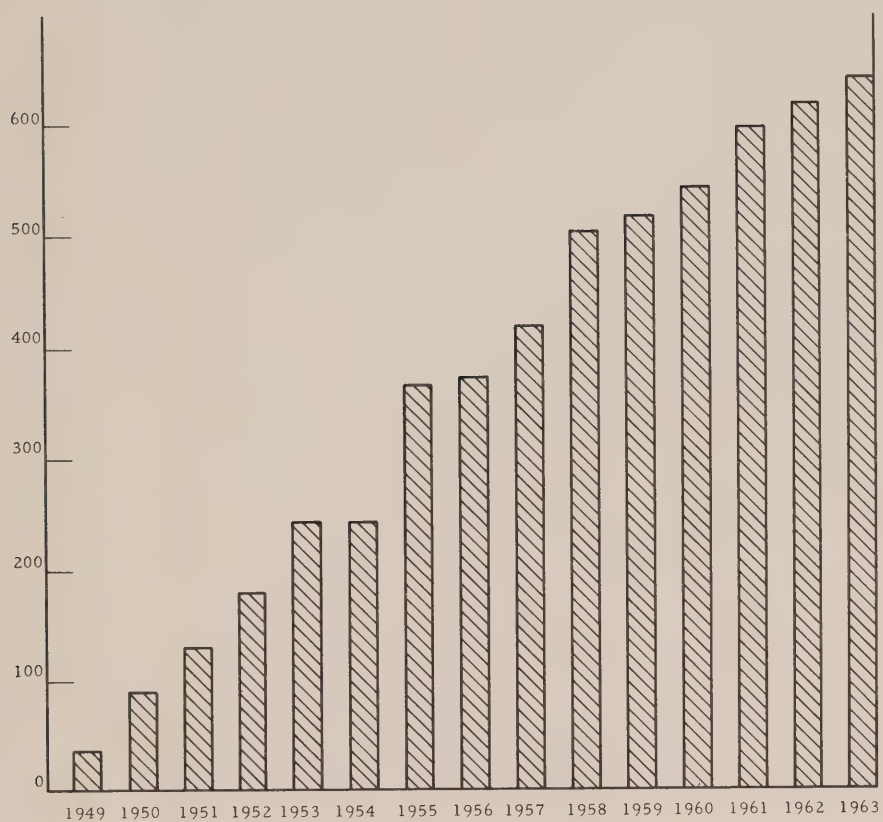
Agreements in effect as at March 31st each year also showing number terminated

 Terminated

 In effect

STATISTICS

INVENTIONS AVAILABLE FOR LICENSING



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**REVIEW
OF
ACTIVITIES
1964**

**INCLUDING
16TH ANNUAL REPORT**



[Canada]

**CANADIAN PATENTS AND DEVELOPMENT
LIMITED**



REVIEW
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ACTIVITIES
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INCLUDING
16TH ANNUAL REPORT

CANADIAN PATENTS AND DEVELOPMENT
LIMITED

DIRECTORS

B. G. Ballard, President,
National Research Council.

R. E. Jamieson, Professor Emeritus,
McGill University.

F. Jarry, President,
Jarry Hydraulics Limited, Montreal.

C. J. Mackenzie,
Consultant, Ottawa.

F. L. W. McKim, Director,
Division of Administration,
National Research Council.

F. T. Rosser,
Vice-President (Administration),
National Research Council.

W. E. van Steenburgh, Deputy Minister,
Department of Mines and Technical Surveys.

F. C. Wallace, President,
Smith and Stone Limited, Toronto.

A. H. Zimmerman, Chairman,
Defence Research Board.

OFFICERS	President	F. T. Rosser.
	Vice-President	F. L. W. McKim.
	Secretary-Treasurer	F. R. Charles.
	Manager	J. R. Johnson.
STAFF	Patent Officers	J. R. Hughes, A. A. Thomson.
	Promotional Officer	K. G. Lund.
	Accounts Officer	K. R. Paul.
	Administrative Officer	L. Lipke.
AUDITOR	The Auditor General.	
BANKERS	The Canadian Imperial Bank of Commerce.	
HEAD OFFICE	National Research Council Building, Sussex Drive, Ottawa, Canada.	



CANADIAN PATENTS AND DEVELOPMENT LIMITED

June 15, 1964.

The Honourable C. M. Drury,
Chairman of the Committee of the
Privy Council on Scientific and
Industrial Research,
Ottawa, Canada.

Sir,

In accordance with Section 85 (3) of the Financial Administration Act, I have the honour to submit to you on behalf of the Board of Directors, the Company's Annual Report for the fiscal year ended March 31, 1964. The Report of the Auditor General, following his examination of the Company's accounts, is attached, together with the Balance Sheet and Statement of Income and Expense covering the operations of the Company.

The Company depends for its supply of inventions on the laboratories of the National Research Council, Federal Government departments and agencies, universities and provincial research organizations. During the past ten years the number of new inventions available for exploitation by the Company has ranged from thirty-two to eighty-four per annum. This year fifty-five new inventions were received.

The policy of the Company is to get its inventions into production as quickly as possible by a Canadian industry. In many cases costly problems are encountered in the scaling up process from laboratory to production line. Recently, the Company has been able to offer some financial assistance to industry for such development work. This year approximately \$100,000 was spent for this purpose.

The Company is fortunate in being able to draw upon the expert knowledge of the scientists in the laboratories of the National Research Council for technical advice and help and in having the close cooperation of officers in the Departments of Industry, Defence Production and Trade and Commerce in its contacts with industry.

In accordance with the Financial Administration Act, the operating budget for the next fiscal year has been approved by you and the Minister of Finance.

Yours very truly,

F. T. Rosser,
President.

6 CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Companies Act)

Balance Sheet as at March 31, 1964
(with comparative figures as at March 31, 1963)

Assets

		<u>1964</u>	<u>1963</u>
Cash		\$ 48,564	\$ 36,270
Accounts receivable	\$ 69,779		169,837
Less: Provision for doubtful accounts	<u>-</u>		<u>6,600</u>
		69,779	163,237
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value March 31, 1964, \$903,160; March 31, 1963, \$639,880)	920,754		651,073
Add: Accrued interest	<u>11,666</u>		<u>8,816</u>
		<u>932,420</u>	<u>659,889</u>
		<u>1,050,763</u>	<u>859,396</u>

Note

The Company had outstanding commitments amounting to approximately \$69,500 as at March 31, 1964, in respect of a development program.

Approved on behalf of the Board -- F. T. Rosser, Director
F. L. W. McKim, Director

	<u>Liabilities</u>	
	<u>1964</u>	<u>1963</u>
Accounts payable	\$ 82,230	\$ 39,636
Capital:		
Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance as at April 1, 1963	\$523,561	
Add: Net profit for the year, per		
Statement of Income and Expense	<u>148,773</u>	
Balance as at March 31, 1964	<u>672,334</u>	<u>523,561</u>
	968,533	819,760
	<u>1,050,763</u>	<u>859,396</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 4, 1964, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

A. M. Henderson,
Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED

Statement of Income and Expense for the year ended March 31, 1964.
 (with comparative figures for the year ended March 31, 1963)

	<u>1964</u>	<u>1963</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$375,756	\$553,972
Less: costs of licensing rights and related technical assistance, etc.	<u>25,166</u>	<u>62,782</u>
	350,590	491,190
Interest earned	37,493	20,773
Income from agency agreements	3,444	2,915
Miscellaneous income	<u>306</u>	<u>186</u>
	391,833	515,064
<u>Expense</u>		
Promotion and development	103,029	6,790
Services provided by National Research Council	42,000	36,000
Patent attorneys' fees and other patent expense	37,921	55,058
Salaries	29,273	28,801
Awards to inventors	15,020	18,640
Legal fees other than for patent expense	9,972	-
Travel	4,532	2,108
Miscellaneous	<u>1,313</u>	<u>1,389</u>
	243,060	148,786
Net Profit	<u>148,773</u>	<u>366,278</u>

Note: Salaries for the year 1964 include
 directors' fees, \$250 (\$200)



AUDITOR GENERAL OF CANADA

Ottawa, June 4, 1964.

The Honourable Charles Mills Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1964. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year, and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

A. M. Henderson,
Auditor General of Canada.

SUMMARY OF ACTIVITIES FOR 1963-64

THE
COMPANY

completed 15 new licensing agreements;
completed 8 new development contracts;
terminated 10 licensing agreements (In addition
13 agreements expired when patent rights
expired);
received \$379, 680 in royalty payments;
spent \$37, 921 on patent prosecution costs;
paid \$15, 020 in awards to inventors;
paid \$30, 556 as share of royalties to other
organizations.

THE
PATENT
SECTION

received 94 new cases for assessment from
NRC, Government Departments and Uni-
versities;
received 38 new cases from AECL for study of
patentability;
organized and attended 18 Patent Committee
Meetings;
attended 8 AECL Patent Committee Meetings at
Chalk River;
supervised the filing by agents of 72 patent appli-
cations;
filed 50 patent applications;
the patent officers made a total of six one-week
visits to the US Patent Office in Washington
and carried out 126 searches.

THE
PROMOTION
SECTION

received 42 new cases filed by the Patent Section;
received 13 new cases filed by Government departments and Agencies;
abandoned 48 cases;
maintained exhibits at
the Production Show in Toronto,
the IEEE Annual Convention in Toronto,
and
the Instrument Society of America Conference in Chicago;
revised the Patents Handbook twice (2700 copies of each revision were distributed);
made 48 visits to manufacturers;
received 193 visits;
negotiated the terms of 19 licensing agreements;
negotiated the terms of 9 development contracts.

MEETINGS

the Company was represented at
the annual convention of the Patent & Trade Mark Institute of Canada;
the OECD (Organization for Economic Cooperation & Development) Second meeting of expert group on development and exploitation of inventions, Paris;
the meeting of the International Association for the Protection of Industrial Property, Ottawa;
the Institute on Patent Incentives & Utilization, The American University, Washington, D. C.

THE COMPANY

Canadian Patents and Development Limited, a subsidiary of the National Research Council, was set up in 1947 to control, develop, and exploit inventions arising from the work of the Council. The Company was intended to bridge the gap between laboratory research and the practical application of its results, and to represent the Council in commercial operations and in any resulting litigation.

In effect the Company was charged with responsibility for:

- assessing ideas for inventive novelty and commercial value, and deciding whether to file patent applications;
- the preparation, filing and prosecution of patent applications;
- seeking licensees for inventions and preparing agreements;
- the development of sound inventions to the point where they can be licensed.

At its inception the Company inherited a number of patents and a few licensing agreements and entered immediately into the speculative business of sponsoring inventions.

The Company cannot predict or control the supply of inventions from its sources in quantity or in quality. It is therefore a fact of life that the Company can expand only as its supply of patents expands. Experience in other countries suggests that this will be at a much slower rate than the increase of expenditures on research.

The Company is stable; its royalty income is now broadly based on 130 licensing agreements, and its solvency no longer depends upon a few profitable agreements. Nevertheless it is in the nature of the Company that its income may fluctuate widely (See Figure 1). Present income remains high primarily because of royalties from one particular case.

When income from this source ends, there may or may not be another "big" revenue earner immediately.

It is important that the real purpose of the Company be kept firmly in mind at times when income drops. This purpose is, of course, to provide new inventions with an entrée into Canadian commercial life. Thus the true measure of the Company's success is not royalty income, but the total amount of internal and export trade generated in Canada.

Patents, however, are wasting assets; they do not keep. If no Canadian industry is in a position to exploit an invention the Company considers it better to earn royalties from a foreign manufacturer than to watch the invention become obsolete. In such cases the Company is at least providing foreign exchange through an "invisible export" of brain power. Fortunately, the Company is having more success now in finding licensees willing to manufacture in Canada.

CP&D has long maintained contact with officers of both the Department of Trade and Commerce and the Department of Defence Production, since all are concerned with the growth of industry in Canada. As a result of recent discussions, it is expected that an even closer liaison will exist between the Company and the new Department of Industry.

SOURCES OF INVENTIONS

In its early days the Company received most of its patents from NRC, but it also took title to groups of inventions arising from such Government contracts as the development of the Orenda engine. The Company has some "say" in decisions to file patent applications on NRC work, and filings were made at Company expense. For the others, the decision to file was made elsewhere.

In 1948, at the request of the National Research Council, the Company offered its services to Canadian

universities; it now has agreements with eighteen universities and provincial research institutions. In return for a share of any net revenue, the Company assesses inventions from these sources and assumes the costs of filing any necessary patent applications.

In 1952, when the Atomic Energy Division of the National Research Council became Atomic Energy of Canada Limited, the Company agreed to continue to handle patent matters for the new organization. However, decisions on patent filings are made by AECL and the costs are absorbed by them.

In 1952 an agreement was completed between the Company and the National Research Development Corporation of the United Kingdom whereby each would handle certain cases belonging to the other, for a percentage of any income received. Agreements have since been made with similar organizations in Australia, India and South Africa.

When the Public Servants Inventions Act became law in 1955, one of its provisions empowered a Minister of the Crown to transfer to the Company the administration and control of inventions from his department. Since then, most of the inventions arising in Government departments have been submitted to CP&D. They are submitted before any decision on patent filings has been made; the Company assesses their commercial merit and normally it files patent applications at its own expense.

There are two exceptions to this arrangement. The Department of Mines and Technical Surveys handles both the filing and the licensing of patents in the mining field, but offers inventions in other areas to the Company on the same basis as do other Government departments. The Department of National Defence handles its own filings in Canada and refers its inventions to the Company for exploitation after these filings have been made. If the company wants protection in other countries the department makes filings at the company's expense.

The relative importance of the various sources of supply is shown in Table 1.

TABLE 1

Source	Received since 1948	Received this year
NRC	965	54
* AECL	826	38
* Department of National Defence	149	13
Other Government Departments	187	24
Universities, etc.	157	16
Overseas Organizations	124	1
* Government Development Contracts (e. g. Orend engines)	176	NIL

* Company has no say in initial patent filing decisions. Approximately 45% of the inventions submitted to the Company since 1948 fall into this category.

This year the promotion section had substantially fewer (55 vs 84) cases referred to it than last year. Most of the decrease is due to a drop in patent filings on inventions from NRC. However, since the number of proposals received annually by the NRC patents section has been fairly constant, the decrease is attributed to more hard-headed discussion at Patent Committee Meetings. With increasing frequency, the committee has decided that a detailed market assessment should

be made before a decision on patent filing. The decrease is thus no cause for alarm; it probably denotes a rise in the average quality of the patent inventory.

PATENTS

Patent rights are the reward an inventor receives for giving the details of his invention to the public. In most countries, including Canada, the patent gives him the right to exclude others from making, using or selling the invention for a period of about seventeen years, and is designed to allow him to make a commercial profit either by using the invention himself, or by licensing or selling the rights.

(It is sometimes argued that Government-owned patents should not be licensed. However, most new inventions require development before their real commercial value can be determined. With patent protection a manufacturer can afford such development -- without it the risk involved may be too great.)

It is common practice in both industry and Government for employers to take ownership of the inventions of their employees. Thus, under the terms of the Public Servants Inventions Act the inventions of public servants normally become the property of the Crown. Many of these come to Canadian Patents and Development Limited.

The patent system, however, was intended as an incentive to inventors; the Public Servants Inventions Act recognized this by providing that an inventor may share in any royalties received from his invention. Awards are made on the authority of the Minister concerned according to the following schedule

TABLE 2

Gross Royalties Thousands of dollars	Maximum percentage inventor may receive
0-10	15%
10-20	13
20-30	11
30-40	9
40-50	7
50-60	5
60-70	4
70-80	3
Over 80	2

During 1963 a total of \$15,020 was paid by the Company in awards to inventors.

When a decision is made to file a patent application, a patent specification must be prepared in the correct format for the Patent Office. Later the specification may have to be amended, and occasionally prolonged arguments with the examiner are necessary. Since the work from the filing of an application to the granting of a patent may therefore be large, many of the Company's patent applications are handled by private agents. However, the Company's staff do file some.

In most of the countries in which the Company is interested, the Patent Office has a large backlog of work; intervals of three or four years between the application for and issue of a patent are not unusual. This year the Company filed 122 new patent applications; but at the end of the year more than 400 applications were under prosecution.

Generally, inventions are not considered to be ready for exploitation until they are protected by patent applications. Occasionally, however, a good piece of design or an improved process is not novel enough to be patented, or

perhaps an idea is of such limited use that the return from licensing would not cover the patenting costs. In spite of this, manufacturers may wish to use the design or know-how concerned. The Company handles such cases by providing all available drawings, models, test results, etc. in return for royalty payments.

ASSESSMENT OF INVENTIONS

Applying for patents is fairly costly -- even a relatively simple case can cost several hundred dollars in each country, by the time a patent is granted -- and in many countries annual renewal fees must be considered.

For this reason, much of the Company's time and effort is absorbed each year in assessment activity. Although, as a result, many of each year's submissions are discarded, the process is considered very important. The Company must ensure that no invention of value to the community is abandoned and that inventors are fairly treated. Included in the assessment function is the identification of potential development projects.

When an idea is submitted to the Company it is first discussed by the patent officers and the promotion staff, who consider its novelty and usefulness. In some cases the experienced staff is able to decide quickly that the idea is not patentable. If there is a possibility, however, that the invention might be of use to the public or be commercially valuable, the invention is then made the object of a Patent Office search. The two patent officers make several visits each year to the US Patent Office in Washington for this purpose.

Another part of the assessment procedure is the Patent Committee Meeting. Such meetings are attended by the patent officers, the promotion officers, the inventors whose ideas are to be discussed, and others who may be invited by the Company as experts. These people consider the novelty

and technical merit of an invention, and its possible commercial value, and decide whether patents should be applied for, and where. In some cases, when the committee is unable to decide on patent filings, the decision may be postponed until further work has been done by the inventor or until the promotion officers have discussed the invention with some possible licensees or other outside experts.

PROMOTION

The objectives of the promotion section are to make industry aware that inventions owned by the Government of Canada are available for licensing; to make companies aware of those inventions which are appropriate for them; and to convince officers of companies that it would be profitable for them to take a license.

Two basic approaches can be used to this end. One is to "look for nuggets", and to put all the available promotional effort into the few ideas with high commercial prospects. The other is to list all the inventions available and to spend some effort on them all. The Company uses an intermediate approach.

Thus, it maintains the Patents Handbook -- a complete listing of all the inventions available for licensing. During 1963 the Handbook was revised twice and revision sheets were sent to more than 2700 people. In addition the Company advertises its holdings by displaying working models of its more intriguing inventions at exhibitions and trade shows. This year displays were maintained at the Production Show in Toronto, at the Canadian Conference of the Institute of Electrical and Electronic Engineers, and at the Annual Convention of the Instrument Society of America. This general missionary function was further assisted by publication in trade journals of descriptions of some of the inventions available.

With some of the more obviously valuable cases, a

much more direct approach is used. Letters are sent to appropriate companies describing the invention and its possible market, and offering it for license. This may be followed up by a personal visit. Many recipients of the Patents Handbook habitually visit the Company's office to discuss possible new products; the same direct approach is used with them.

LICENSING POLICY

When prospective licensees are found, the promotion officers negotiate the royalty rates and other terms of the license. The Company has no standard form of licensing agreement because of the great variety of cases -- an agreement suitable for a specialized scientific instrument might be quite unsuitable for a tonnage chemical or a food product. Generally, agreements are on a royalty basis with an annual minimum royalty designed to encourage the licensee to cancel his license if he is not using it.

The Company must be extremely flexible in acting in the public interest while at the same time paying its way by making commercially sound agreements. For example, licenses have been granted to small Canadian companies when it would clearly have been more profitable to license a larger foreign manufacturer. On the other hand, some earlier agreements, in very highly specialized fields, granted exclusive rights in foreign countries to foreign companies because no Canadian manufacturer was interested. The Company believes that the latter decisions were sound, but is pleased to observe that there now seems to be less need for them.

Some of the recent agreements with subsidiary companies have granted worldwide sales rights, but have given manufacturing rights in Canada only. Almost all agreements

retain rights of manufacture and worldwide selling rights for Canadian licensees.

It is perhaps inevitable that an organization which licenses patents will become involved in legal arguments over patent infringement. The Company is at present involved in two such actions and has budgeted funds for them.

THE PATENT INVENTORY

It was observed in the last Annual Report that the Company is more successful in licensing inventions on which it had participated in the decision to file patent applications than with patents received after the filing decision has been made elsewhere.

In June 1963 a formal study was made, and all cases received from all sources in the preceding three-year period were catalogued under these categories:

- A. cases ready for licensing and having good commercial prospects;
- B. cases ready for licensing and having a reasonable market, but which
 - (a) are not a unique solution to the problem,
 - or (b) have limited patent coverage,
 - or (c) have a specialized field of application;
- C. cases (a) on which patent protection is narrow, or (b) which provide very minor improvements in the particular field;
- D. cases (a) having apparently no immediate commercial value, or (b) considered obsolete.

The results are shown in Table 3.

TABLE 3

INVENTIONS RECEIVED DURING
THE PREVIOUS THREE YEARS

(Brackets indicate cases licensed.)

Source	A	B	C	D	Total	% Licensed	% licensed counting Antac and Counter Mortar Radar as single cases
NRC	1	32 * (12)	19 (7)	5 (1)	57 (20)	35	44
AECL	0	2 (2)	16 (2)	8	26 (4)	15	15
National Defence	3 (3)	10 * (8)	35 (3)	23	71 (14)	20	14
Other	1 (1)	5 (3)	19 (1)	8	33 (5)	15	15
Total	5 (4)	49 (25)	89 (13)	44 (1)	187 (43)	23	22
%	2.5%	26%	48%	23.5%	100%		

* NRC - B group includes 13 cases on Counter Mortar Radar (not licensed)

* National Defence - B group includes 6 Antac cases (licensed)

The study demonstrated that the simple counting of patents without regard to age or quality is very misleading. Only $2\frac{1}{2}\%$ of the cases studied were rated A while $23\frac{1}{2}\%$ were rated D; as time goes by the unlicensed D's accumulate. Obviously the ratio of licenses concluded to total patents owned is not a valid measure of success in licensing.

In this connection, a significant change was made during the year in the handling of inventions from Atomic Energy of Canada Limited. AECL Patent Committee Meetings now consider the possible commercial exploitation of new cases and decide whether they are exploitable by the Company or not. One of the Company's promotion officers now attends all Patent Committee Meetings at Chalk River. Most patent applications filed by AECL are concerned with the details of reactor technology, and are being labelled "Not Exploitable by Canadian Patents and Development Limited."

Also during 1963 a drastic reassessment was made of inventions already received from the National Research Development Corporation and from AECL. Many were declared obsolete and deleted from the list of available cases. This process is continuing and should result in a smaller and better stock of inventions.

DEVELOPMENT

For some inventions there is a considerable gap between the original laboratory work and its commercial application -- a development gap -- that must be filled. Many processes, for example, have to be brought through the pilot plant stage before their true commercial merit can be assessed; other ideas require considerable engineering effort before they become products.

The Company is now trying to fill this gap by investing some of its retained earnings in contracts for development of the more promising inventions. As the Company can

not support very long-range or expensive development, most of these contracts have been small. Nevertheless they appear to be useful and likely to lead to the manufacture in Canada of products which otherwise would not be made here. The development program is of great value to smaller companies as it helps them over the expensive interval before sales begin.

Three projects which started in previous years are still active and eight more were begun this year. Details of these and some of the cases under consideration are given in Appendix A.

APPENDIX A

DEVELOPMENT PROJECTS

DEVELOPMENT PROJECTS

1 PROJECTS CONTINUING FROM THE PREVIOUS YEAR

Densimeter - an instrument for the continuous measurement of density in homogeneous liquids. A design study showed that the original ideas on the most likely application of this instrument were not correct. The instrument is therefore being redesigned, as a portable laboratory instrument for demonstration purposes.

Vascular Suturing Instrument - an instrument system for the joining of blood vessels, using tantalum staples. Thirteen sets of instruments are on loan to surgeons in Canada and other countries, and experimental surgery using them has been very successful.

Plating Process - a process for plating nickel directly on to aluminum. Laboratory-scale plating studies are continuing, with promising results. Commercial interest is good and trials can be arranged when the laboratory work is complete.

2 PROJECTS STARTED THIS YEAR

Agglomeration Process - a process for separating the constituents of a slurry by selective agglomeration. A contract was let for the study of a continuous process suitable for application to the ore-dressing field, with particular application to tin ore. Because of difficulties encountered in converting the process from batch to continuous operation, the program may be switched back to the laboratory for further study.

Staple-forming and Loading Machine - equipment required to produce staples and load them into the bushings of the vascular suturing instrument. An auxiliary device of this kind may be vital to the general adoption of the suturing instrument. A model at ten times full scale has been built and performs satisfactorily. The instrument design is well advanced and the prototype should be available shortly.

Sudorimeter - an instrument for measuring rates of sweating. It may be useful in many applications including the measurement of physical or mental stress, or level of consciousness. Purchase orders have been placed for instruments for use in experimental trials.

Humidity Sensing Element - a vital part of the sudorimeter is a very sensitive humidity sensing element with fast response. The laboratory process for producing them yields a mixture of good and bad elements which can only be distinguished in use. A contract has been let for the study of quality control methods.

Phase Shifter - a device for altering the phase of a microwave signal. The original device requires development to determine design parameters and possible applications of the same principles to other devices. A contract has been let to the licensee. The Company has also agreed to pay for the testing, in the United States, of a high power version built at the National Research Council.

Perforated Hollow Packings - these packings have useful effects on the behaviour of fluidized beds and

have many possible applications. A supply of the packings is now available on loan to those wishing to try out the process.

Distress Beacon - a simple distress beacon for use in boats or aircraft. The licensee is under contract to develop a commercial model and to produce five prototypes for trial.

Fish and Potato Flakes - a new dehydrated food product. Experimental production has been undertaken by the Department of Fisheries and consumer trials are being conducted by the Department of Agriculture. The Company is contributing to the payment for these trials.

3 PROSPECTIVE DEVELOPMENT PROJECTS

Nickel Cadmium Batteries - a group of inventions in this field is gradually accumulating and it may soon be feasible to combine them into a workable process for battery production.

Coulometer - a device for measuring and controlling the charging and discharging of batteries. Interest is being shown abroad but Canadian production may have to be encouraged.

Lubricating Oil Treatment - a new device to prevent deterioration of lubricating oils in industrial engines. Trials are now under way on a railway diesel engine; several experimental models may be required for field tests.

REVIEW OF ACTIVITIES

Anti-allergic Substance - a new substance of this type has been isolated from natural sources, and its synthesis now appears possible. The Company might support work on the process, or the production of enough of the substance for extensive trials.

Tree Planter - a tool for automatically planting tree seedlings grown in special plastic bullets. The Company is willing to support the design and production of a satisfactory prototype, with enough bullets for large scale trials.

Computer - a solid state integrating circuit based on statistical principles. The prospective licensee may undertake the development of a simplified working model suitable for use in navigational equipment.

APPENDIX B

GRAPHICAL INFORMATION

FIGURE 1

ANNUAL INCOME AND EXPENSE

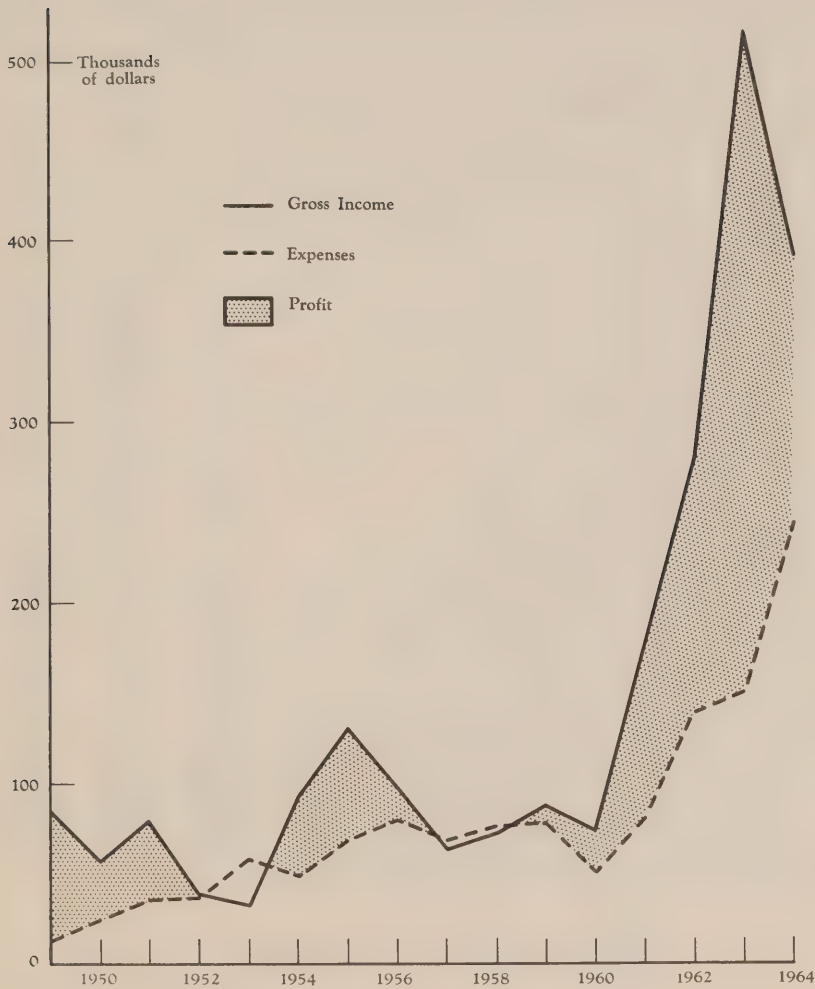


FIGURE 2

ROYALTY INCOME FOR THE PAST SEVEN YEARS

The chart shows net royalty income, and the proportion due to the most profitable license. Figures in brackets indicate the total number of profitable licenses.

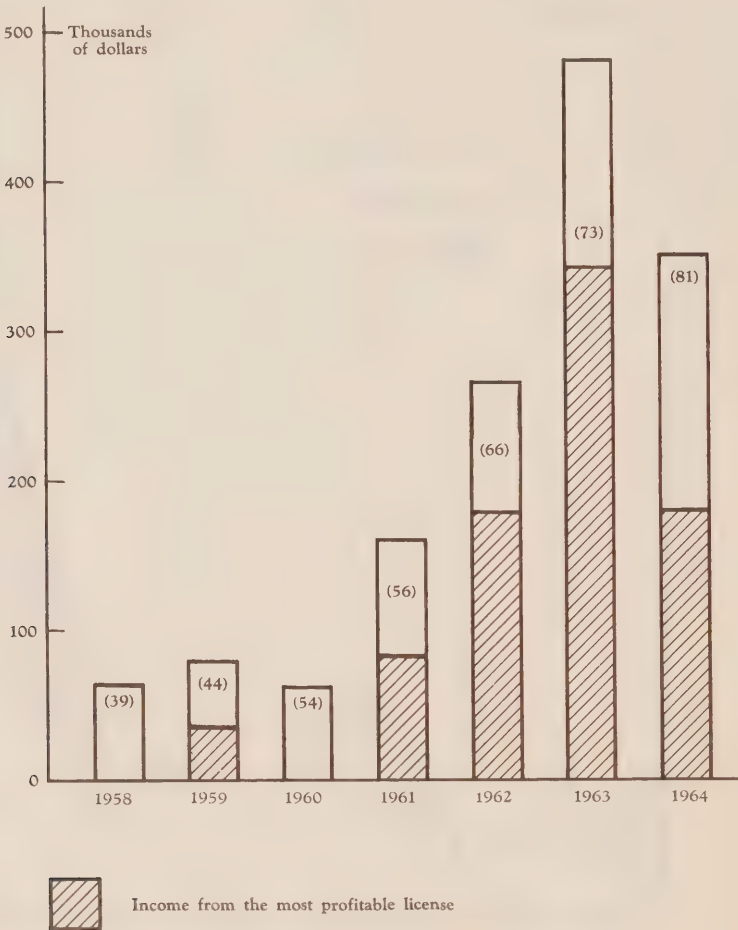


FIGURE 3

LICENSING AGREEMENTS

The effective lifetime of some licensing agreements is much less than the 17 years for which patent rights exist; every year, therefore, a few agreements are cancelled. In addition, the Company is now old enough for some early agreements to end because all the patent rights have expired.

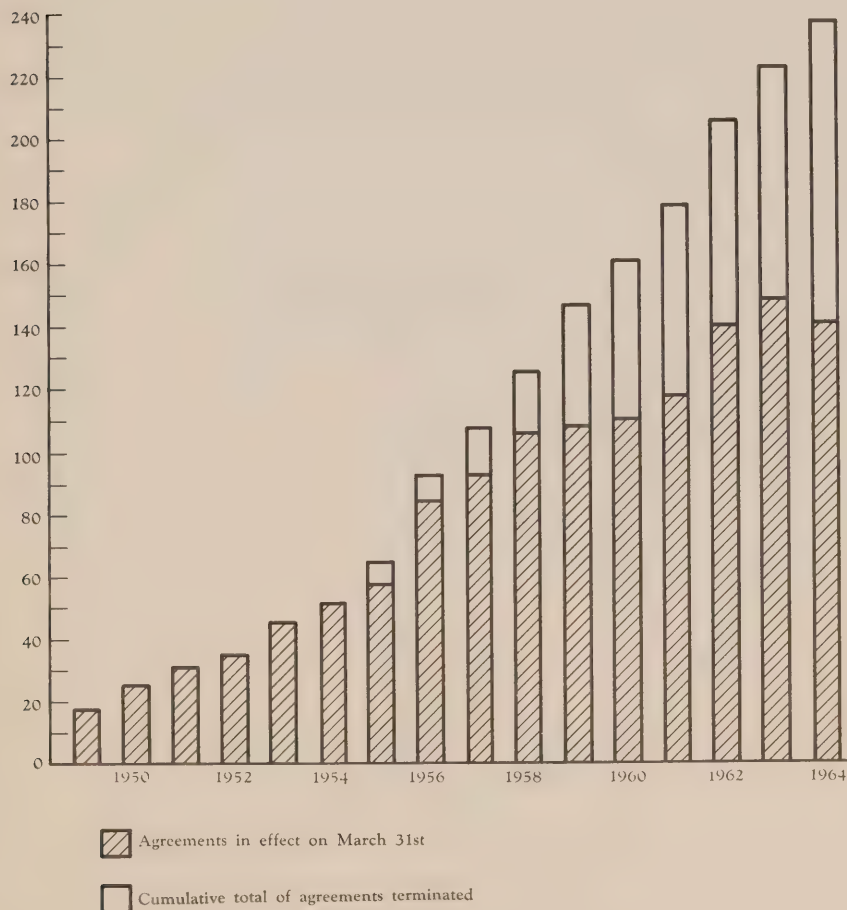
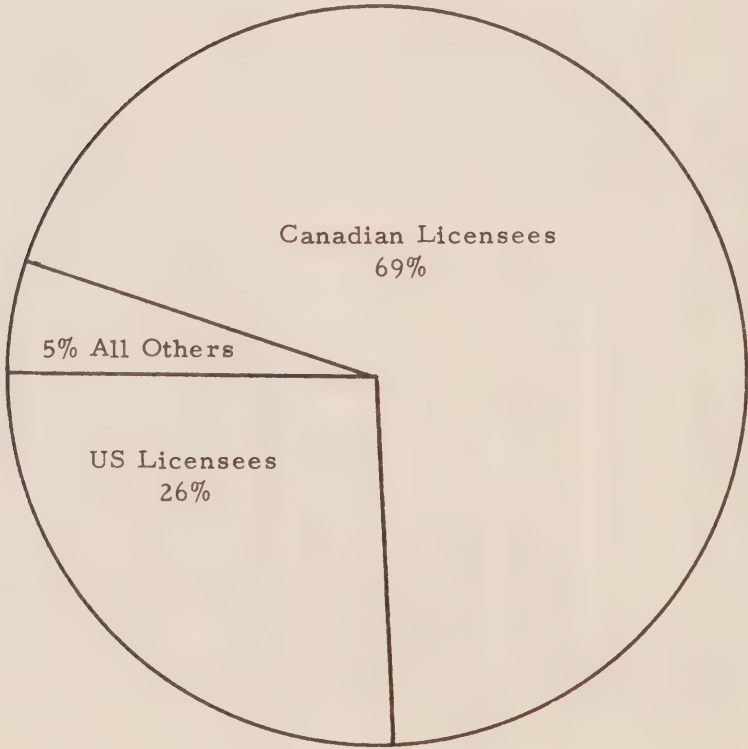


FIGURE 4

ORIGIN OF ROYALTY INCOME

The largest portion of the Company's royalty income for this fiscal year was derived from Canadian companies, with smaller percentages coming from American and other licensees throughout the world.



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REVIEW OF ACTIVITIES

1965

INCLUDING
SEVENTEENTH
ANNUAL REPORT



[Canada]

CANADIAN PATENTS AND DEVELOPMENT LIMITED



REVIEW OF ACTIVITIES

1965

INCLUDING
SEVENTEENTH
ANNUAL REPORT

CANADIAN PATENTS AND DEVELOPMENT LIMITED

DIRECTORS

B. G. Ballard, President,
National Research Council.

R. E. Jamieson, Professor Emeritus,
McGill University.

F. Jarry, President,
Jarry Hydraulics Limited, Montreal.

C. J. Mackenzie,
Consultant, Ottawa.

F. L. W. McKim, Director,
Division of Administration,
National Research Council.

F. T. Rosser,
Vice-President (Administration),
National Research Council.

W. E. van Steenburgh, Deputy Minister,
Department of Mines and Technical Surveys.

F. C. Wallace, President,
Smith and Stone Limited, Toronto.

A. H. Zimmerman, Chairman,
Defence Research Board.

OFFICERS	President	F. T. Rosser.
	Vice-President	F. L. W. McKim.
	Secretary-Treasurer	F. R. Charles.
	Manager	J. R. Johnson.
STAFF	Patent Officers	J. R. Hughes, A. A. Thomson.
	Promotional Officer	K. G. Lund.
	Accounts Officer	K. R. Paul.
	Administrative Officer	L. Lipke.
AUDITOR	The Auditor General.	
BANKERS	The Canadian Imperial Bank of Commerce.	
HEAD OFFICE	National Research Council, Montreal Road, Ottawa 7, Canada.	



CANADIAN PATENTS AND DEVELOPMENT LIMITED

June 23rd, 1965

The Honourable C. M. Drury,
Chairman of the Committee of the
Privy Council on Scientific and
Industrial Research,
Ottawa, Canada.

Sir,

In accordance with Section 85(3) of the Financial Administration Act, I have the honour to submit on behalf of the Board of Directors, the annual report of Canadian Patents and Development Limited for the fiscal year ended March 31, 1965. The Company's Financial Statement and the Report of the Auditor General are included.

Under its charter, the Company is responsible for making available to Canadian industry, and others, inventions arising from the work of the National Research Council's laboratories. In accordance with the Public Servants Inventions Act, the Company may patent and exploit any inventions referred to it from the research establishments of Federal Government Departments. The Company has also contracted to handle inventions from a number of Crown Agencies and universities. During the past five years, which have been the best in the Company's history, an average of 50 patentable inventions per annum have been received from all the organizations with which we work.

It is obvious that the inventions available to Canadian Patents and Development do not come from institutions directly concerned with the development of commercial products. For the few cases of evident commercial value, the Company does not have to search for licensees; rather it must decide which of several qualified and enthusiastic applicants is best able to handle development, production and marketing. For most cases, however, it is necessary to persuade companies that licensing is worthwhile. Our promotion officers, now working in co-operation with the Department of Industry, have been successful in licensing 24% of the inventions received during the past five years, many of them to several companies.

The Company was incorporated in 1947 and operates at no expense to the taxpayer. While contributing to the growth and sophistication of Canadian industry, it has increased its net worth to \$1,185,646. The net profit for this fiscal year amounts to \$217,113. It is the policy of the Company to invest its profits in the development of its inventions for use by industry. In the past year \$38,984 was spent on development projects. Expenditures for this purpose will increase with the number of inventions the Company has for exploitation and will vary considerably with the type of invention under development.

The operating budget for 1965-66 has been approved by you and the Minister of Finance as required by the Financial Administration Act.

Yours faithfully,

F. T. Rosser,
President.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Companies Act)

Balance Sheet as at March 31, 1965
(with comparative figures as at March 31, 1964)

Assets

	<u>1965</u>	<u>1964</u>
Cash	\$ 70,309	\$ 48,564
Accounts receivable	68,668	69,779
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value, March 31, 1965, \$1,088,047; March 31, 1964, \$903,160)	\$1,094,635	920,754
Add: Accrued interest	<u>13,495</u>	<u>11,666</u>
	1,108,130	932,420
	<u>1,247,107</u>	<u>1,050,763</u>

Note

The Company had outstanding commitments amounting to approximately \$25,000 as at March 31, 1965, in respect of a development program.

Approved on behalf of the Board -- F. T. Rosser, Director
B. G. Ballard, Director

	<u>Liabilities</u>	
	<u>1965</u>	<u>1964</u>
Accounts payable	\$ 61,461	\$ 82,230
Capital:		
Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance as at April 1, 1964	\$672,334	
Add: Net profit for the year, per Statement of Income and Expense	<u>217,113</u>	
Balance as at March 31, 1965	<u>889,447</u>	<u>672,334</u>
	1,185,646	968,533
	<u>1,247,107</u>	<u>1,050,763</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 14, 1965, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

George Long,
for Auditor General of Canada.

Statement of Income and Expense for the year ended March 31, 1965
(with comparative figures for the year ended March 31, 1964)

	<u>1965</u>	<u>1964</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$396,582	\$375,756
Less: costs of licensing rights and related technical assistance, etc.	<u>34,978</u>	<u>25,166</u>
	361,604	350,590
Interest earned	45,091	37,493
Income from agency agreements	4,153	3,444
Miscellaneous Income	<u>104</u>	<u>306</u>
	410,952	391,833
<u>Expense</u>		
Promotion and development	49,761	103,029
Services provided by National Research Council	48,000	42,000
Patent attorneys' fees and other patenting costs	44,210	37,921
Salaries	30,610	29,273
Awards to inventors	17,370	15,020
Legal fees	1,841	9,972
Travel	999	4,532
Miscellaneous	<u>1,048</u>	<u>1,313</u>
	193,839	243,060
Net profit	<u><u>217,113</u></u>	<u><u>148,773</u></u>

Note: Salaries for the year 1965 include
directors' fees, \$350 (\$250).



AUDITOR GENERAL OF CANADA

Ottawa, June 14, 1965.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1965. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

George Long,
for Auditor General of Canada.

SUMMARY OF ACTIVITIES FOR 1964-65

THE
COMPANY

completed 16 new licensing agreements;
completed 4 new development contracts;
terminated 7 licensing agreements;
received \$399,029 in royalty payments;
spent \$44,210 on patent prosecution costs;
spent \$38,984 on development contracts;
paid \$17,370 in awards to inventors;
paid \$36,960 as share of royalties to other organizations.

THE
PATENT
SECTION

received 91 new cases for assessment from NRC,
Government Departments and Universities;
received 42 new cases from AECL for study of
patentability;
organized 19 Patent Committee Meetings;
attended 8 AECL Patent Committee Meetings;
filed in various countries 47 patent applications;
supervised the filing by agents of 102 patent
applications;
the patent officers made a total of six one-week
visits to the US Patent Office in Washington
and carried out 122 searches.

THE
PROMOTION
SECTION

received 38 new cases filed by the Patent Section;

received 8 new cases filed by Government departments and Agencies;

abandoned 14 cases;

negotiated terms for 26 licensing agreements;

negotiated terms for 6 development contracts;

exhibited at the Canadian Chemical and Equipment Exhibition in Toronto;

made 24 visits to manufacturers;

received 157 visits;

revised the Patents Handbook twice (2,800 copies of each revision were distributed).

Before the patent system was devised manufacturers had to rely on secrecy to keep information on their processes and products from their competitors. Some jealously guarded trade secrets were passed by word of mouth to trusted employees for generations before they became public knowledge. In extreme cases the secrets died with the inventor and were lost to society. Secrecy did nothing to encourage innovation and tended to limit production and to keep prices high.

The first patent law, instituted in Venice in 1474, rewarded the inventor who made his idea public by granting him a temporary monopoly. He could then use the invention himself; or he could license or sell the rights, so that inventions used commercially would automatically give him a financial return. The document conferring the monopoly--the patent--was strictly a commercial document, not a certificate of merit; it was valueless if the invention were not used.

Most countries now have a patent system. These systems differ in detail, but the basic principle is universal--the inventor who releases his idea to society is given the right to exclude others from using the idea for about seventeen years; then it becomes public property.

The Government of Canada spends large sums of money on scientific research, and while it is not the primary aim of this research to produce them, some patentable inventions do arise. Like other large employers, the government takes ownership of its employees' inventions, so that it comes to own assets which may have, for a limited time, a commercial value.

For a few of these inventions--for example, some in the fields of Atomic Energy and National Defence--patents may have value for bargaining or protection. The majority of inventions, however, are of value only if they are used by industry.

Most new ideas need development before they can be marketed, and often a manufacturer cannot justify investment in such development unless he has some kind of exclusive position. "Use by industry" therefore implies licensing--and patents. Since it may be necessary to choose one licensee from several applicants, the only reasonable procedure is to accept payment for the right to use the asset. It is upon this premise that Canadian Patents and Development Limited operates.

Canadian Patents and Development Limited is a Crown Corporation set up in 1947 as a subsidiary of the National Research Council, to control, develop and exploit inventions arising from the Council's work. It was capitalized with the contents of the NRC patent fund--\$296,000 (mostly profits from earlier licensing agreements); since then, while contributing to the growth and sophistication of industry in Canada, it has increased its net worth to more than one million dollars. It is self supporting and operates at no expense to the Canadian taxpayer.

At first the Company received most of its inventions from NRC, though it also took title to some arising from such government contracts as the development of the Orenda engine. It has now broadened its scope considerably.

Most government departments now ask CP&D to handle inventions for them. The Company has agreements to handle patent matters for Atomic Energy of Canada Limited, and for a number of Canadian universities and provincial research councils. It also has agency agreements with the National Research Development Corporation in the United Kingdom and with similar organizations in Australia, India and South Africa. It does not, however, handle inventions for private citizens.

The Company can accept inventions at the idea stage. First, it assesses the idea from the standpoints of inventive novelty and commercial value, and decides whether to file patent applications and in what countries. Then it arranges the filing

of patent applications, on its own or through commercial patent agents. Once the idea is covered by a patent application, it is ready for licensing; the Company must bring it to the attention of prospective licensees, pointing out its commercial merit. If necessary, the Company then negotiates licensing terms and, finally, prepares an agreement.

For about half of the inventions received, however, the decision to file patent applications is made outside the Company, often for reasons not connected with the possibility of royalty return. Not surprisingly, CP&D is less successful in licensing them. (See Figure 5.)

Patents are costly, and in assessing an idea a first consideration is whether its potential royalties might cover at least the costs of patenting. The Company can call upon scientists in many laboratories for technical advice, but the decision often hinges more upon patent and licensing factors than upon technical ones. The value of an invention often depends upon the resources that can be mustered behind it; in the hands of an enthusiastic licensee, a narrow patent can yield substantial profits.

The Company must strike a very delicate balance: it should not waste money on fruitless patents, but it must avoid filing only the obviously profitable cases. While the staff need a broad background in both technology and business practices, imagination and an open mind are also demanded, for patent licensing is inherently risky--and sometimes the long shots pay off.

The economics of patenting cannot be considered only in terms of the Company's balance sheet; the public interest must be taken into account. An "unprofitable" patent might be valuable to the public if it ensures that an invention such as a new medical instrument is made available. In addition, CP&D can through its licensing policies encourage Canadian companies to enter new fields of technology, so it must also consider the invention's influence on the development of secondary industry in Canada. The Company takes pride in the fact that 46% of its royalty income is earned in Canada, most of it from the export of sophisticated technical equipment.

There are, however, good reasons for licensing in other countries. Many inventions received by CP&D have a specific purpose. When the market is small, as in the case of a scientific instrument, it is possible (provided that a licensee can be found) to insist upon manufacture in Canada. But when the market is large, as with dehydrated foods, for example, to license Canadian companies only would simply ensure that elsewhere the patents would be infringed, or alternative ideas used.

Moreover, some inventions are discoveries having a broad spectrum of possible uses. An example is the process for selectively agglomerating materials from fluid suspensions. This has application in the recovery of industrial wastes, in the extraction of oil from tar sands, in mining and the upgrading of ores, and in certain manufacturing processes. Inventions of this kind should be licensed as widely as possible (though perhaps exclusively in particular applications). Nothing would be gained by trying to limit them to Canadian licensees.

These differences apply also to methods of exploiting inventions. The kind of company that would make the best licensee for a specific case is usually obvious. The problem here is to gain the interest of such companies. But for the rarer broad-spectrum cases, the first problem is to think of applications for it, or to find the people who can recognize the invention as the solution to one of their problems.

Canadian Patents and Development Limited gets its inventions from institutions not directly concerned with development of commercial products. Few of these ideas are possible consumer products, and rarely does a case arise upon which one could found a new company. For the new cases with obvious commercial value, the Company does not have to search for licensees; rather it must decide which of several qualified and enthusiastic applicants is best able to handle development, production and marketing. For the majority, however, it is necessary to publicize them and to persuade companies that licensing is worthwhile.

Patent licensing is a matter both of economics and of timing. Even when an invention is directly relevant to a company, it might not be accepted. For example, a new process for making nickel cadmium battery plates was licensed to a large American company when that company was reconstructing its production facilities; no other company in the same industry has yet become interested--the savings from using the new process do not justify scrapping existing plant.

Canadian Patents and Development Limited must seek most of its licensees among smaller companies. Since large companies can only afford to manufacture products with high sales volume, they tend to become interested only in obviously valuable inventions. The company most likely to receive new ideas with enthusiasm is one making a change of emphasis--for example, a company anxious to make itself less dependent upon military orders, or one in a diminishing market. Particularly interested are newly established companies dependent upon a single product.

Since it is impossible for CP&D to be aware of all such changes of emphasis in smaller companies or even to know of the existence of some of the newer ones, a primary function of the promotion section must be publicity. Ideally, companies should think automatically of CP&D whenever they start to think about new products.

The Company therefore participates regularly in exhibitions, displaying models and samples of some of the more interesting or spectacular inventions currently available--usually with at least one working model to attract visitors to the booth. An attractive give-away folder, "Inventions for Industry", is distributed. The idea is not only to license the ideas shown but also to tell people that the Company exists and how it operates.

The personal contact at exhibitions is most valuable. It is a two-way street, for the staff learns much from visitors. Some have suggested quite unexpected applications for broad-spectrum cases--a few of these suggestions have led to valuable licensing agreements.

The Company maintains contacts it has made at exhibitions by distributing the Patents Handbook. The handbook--a loose-leaf listing of all inventions available for licensing--is kept up to date by the issue of revisions twice each year. This year 2,800 copies of each revision were distributed. A fairly steady correspondence arises from enquiries about cases in the handbook.

The Company welcomes visitors to the office. It is often possible for a visitor, after a discussion of his interests, to go directly to the appropriate laboratories for talks with inventors. Some licensees visit the Company and the NRC laboratories several times a year.

DEVELOPMENT

The value of some inventions (for example, chemical processes) lies in the savings they permit. Decisions about licensing may be more a matter of cost accounting than of chemistry; and prospective licensees may demand not theoretical calculations, nor test tube results, but data from actual pilot plant operation. In such cases, the Company may have to spend large sums of money to find out if the case is licensable. There is considerable risk here, but success can be well rewarded. If a chemical or mining process is used at all it is usually used on a very large scale. Before most of the patents expired, the Nitraprills process (for pelletizing ammonium nitrate) was licensed to 18 companies and produced more than \$372,000 in royalties. Such a case by itself almost justifies the existence of CP&D.

There is also room for development expenditures on a smaller scale. Sometimes a modest sum spent to help a licensee develop a product will permit a Canadian company to enter a new technical field. This may be well worthwhile even if the expenditure is not entirely recovered from later royalties.

The Company's financial position now permits it to undertake more development activities. A few contracts exist already--most of them small. These are discussed separately in Appendix A.

APPENDIX A

DEVELOPMENT PROJECTS

DEVELOPMENT PROJECTS

AGGLOMERATION PROCESS

a technique whereby finely divided solids mixed in a fluid suspension are made to agglomerate selectively into spheres of controlled size that can easily be separated. The chemicals that promote agglomeration are usually cheap or recoverable.

Almost a laboratory curiosity at first, though with wide implications, the technique was a classic example of an invention that needed development.

After showing the invention at exhibitions and licensing it to two companies, CP&D gave a development contract to a mining organization to investigate its use in upgrading tin ore. This contract has ended; the contractor has taken a license and is continuing the work at his own expense.

CP&D is now providing equipment for and supporting a staff working in a laboratory close to the NRC inventors. They are investigating several areas in which the process might be valuable and their early results are most encouraging. Several companies are following the work closely and may decide to extend it; it is almost certain that some of them will take licenses.

CERAMIC PROCESS

a process in which ceramic materials are fired under high pressure. Products having unusually high density, strength, and dimensional accuracy can be produced in minutes at 700°C. instead of the usual days at 1200°C.

The technique is quite different from existing methods used in the ceramics industry, and needs unusual equipment. CP&D is therefore seeking a contractor willing to make a detailed investigation of its technical and commercial feasibility. A small contract has already been let to a company which makes ceramics and has facilities for research, to study heating methods in an attempt to produce a working demonstration for use at exhibitions.

MAGNETIC CLUTCH

a new idea for a clutch design that arose from work on an airborne crash position indicator system. CP&D has let a contract to a Canadian company to work out a practical design and to produce the prototype of a clutch suitable for commercial production.

COMPUTER

an electronic integrating circuit that operates on statistical principles. A development contract was written to allow the licensee to produce a device accurate and reliable enough to replace a mechanical resolver in one of his products. The contractor is also studying possible uses of the circuit in automatic control systems, and has produced a working model for demonstration and display purposes.

DISTRESS BEACON

a simple radio distress beacon for fisherman or bush pilots. Prototypes have been tested by search and

rescue organizations, but general adoption of the beacon depends upon lowering its retail price. CP&D has agreed to underwrite the costs of redesigning for production by buying five prototype instruments. The contractor has already made and tested the first model.

SUDORIMETER

a sweat-rate measuring instrument that can be used to measure emotional and physical stress, level of consciousness, etc.

CP&D ordered two instruments from the licensee. They have been tested and the licensee is now reworking them to increase their sensitivity. One of the instruments will be used by the Psychology Department at the University of Ottawa. CP&D is arranging for the other to be used in experiments to determine its usefulness as a measure of depth of anaesthesia.

HUMIDITY SENSING ELEMENTS

small pieces of plastic, treated chemically so that their electrical resistance changes quickly with humidity. They are a vital part of the sudorimeter instrument, and were developed because no commercial elements were suitable.

The inventor's method of making them yields a mixture of good and bad units that can only be distinguished after several hours of use. CP&D therefore let a small contract to the licensee for a study of quality control and testing methods. Early work suggested some redesigning of the instrument itself; when improved instruments are ready the work will continue.

VASCULAR SUTURING INSTRUMENT

a surgical instrument for joining severed blood vessels, which allows the surgeon, in one minute, to make a bloodtight joint that might take half an hour by hand, and enables him to join vessels too small to be joined by hand.

Before such an instrument can be placed on the market, it must be thoroughly tested and it must be accepted by the medical profession. To make this possible CP&D bought sets of instruments from prospective licensees and made them available on loan to surgeons around the world. Most comments from users have been favourable. The licensee selected is now making a pilot production run of instruments to be sold for clinical evaluation.

STAPLE FORMING AND LOADING MACHINE

a machine for making, and pre-loading into small bushings, the tantalum staples used in the vascular suturing instrument. In early experimental surgery this work was done by hand, but the manual procedure is quite impractical for a commercial instrument. Under a development contract, the licensee has designed and constructed a suitable machine.

MICROWAVE PHASE SHIFTER

a device for altering the phase of a microwave signal. After licensing it to a small Canadian company, CP&D paid the licensee to study methods of manufacturing the basic structure and of improving its performance. The licensee has built a working prototype, and has already sold two units commercially.

APPENDIX B

GRAPHICAL INFORMATION

FIGURE 1

ANNUAL INCOME AND EXPENSE

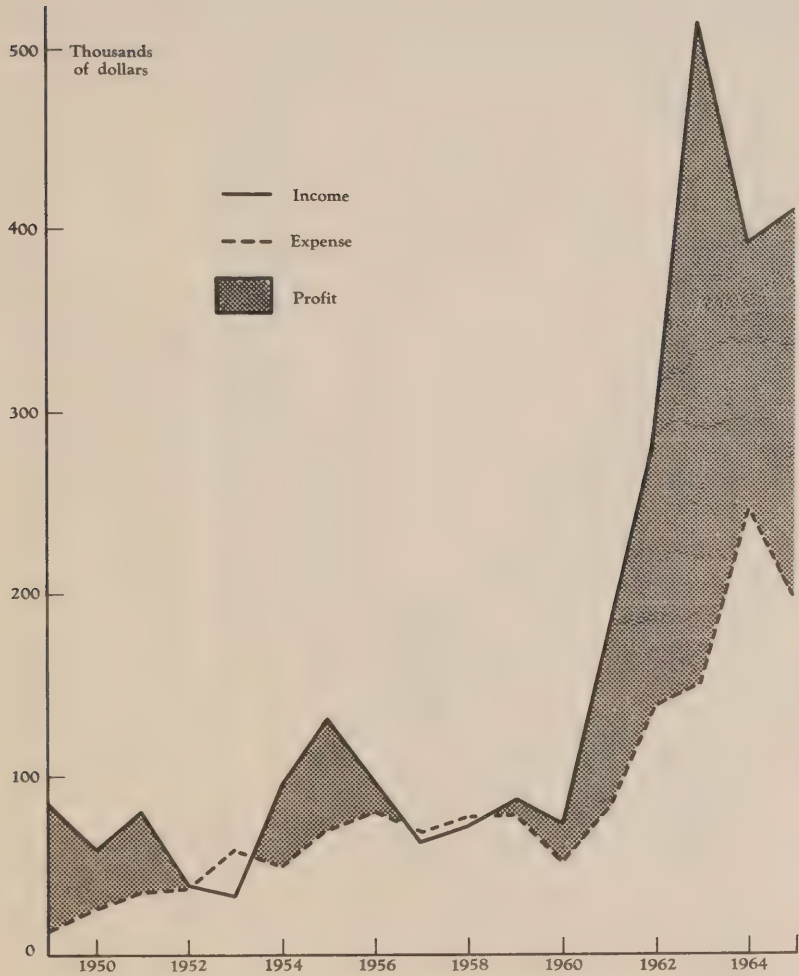
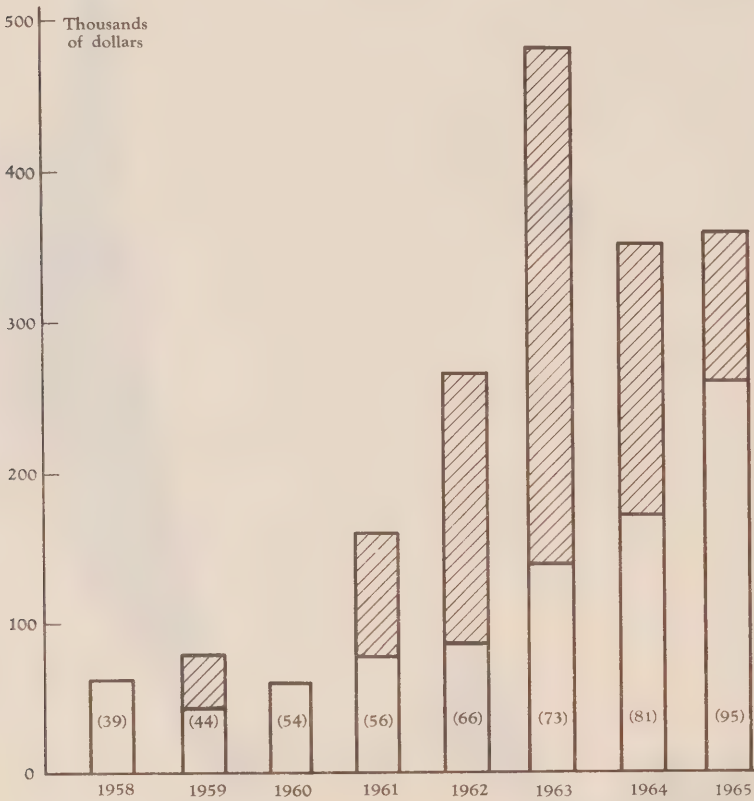


FIGURE 2

ROYALTY INCOME FOR THE PAST EIGHT YEARS

The chart shows net royalty income, and the proportion due to the most profitable license. Figures in brackets indicate the total number of profitable licenses.



Income from the most profitable license

FIGURE 3

LICENSING AGREEMENTS

The effective lifetime of some licensing agreements is much less than the 17 years for which patent rights exist; every year, therefore, a few agreements are cancelled. In addition, the Company is now old enough for some early agreements to end because all the patent rights have expired.

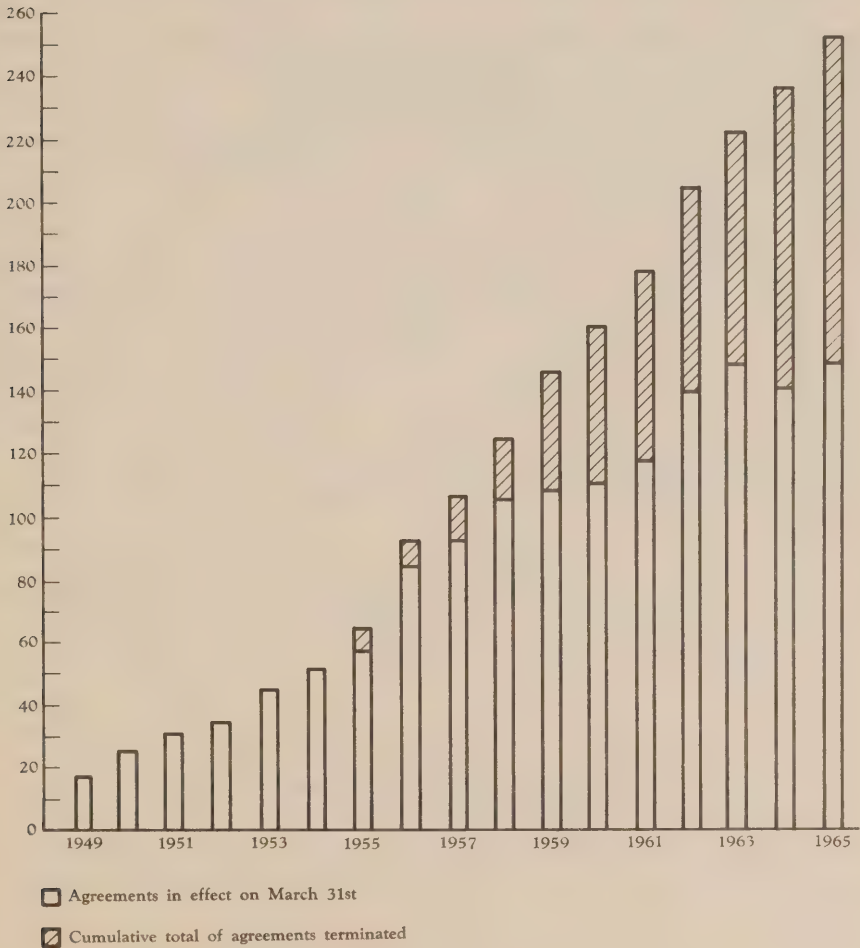


FIGURE 4

ORIGIN OF ROYALTY INCOME

The largest portion of the Company's royalty income for this fiscal year was derived from Canadian companies, with smaller percentages coming from American and other licensees throughout the world.

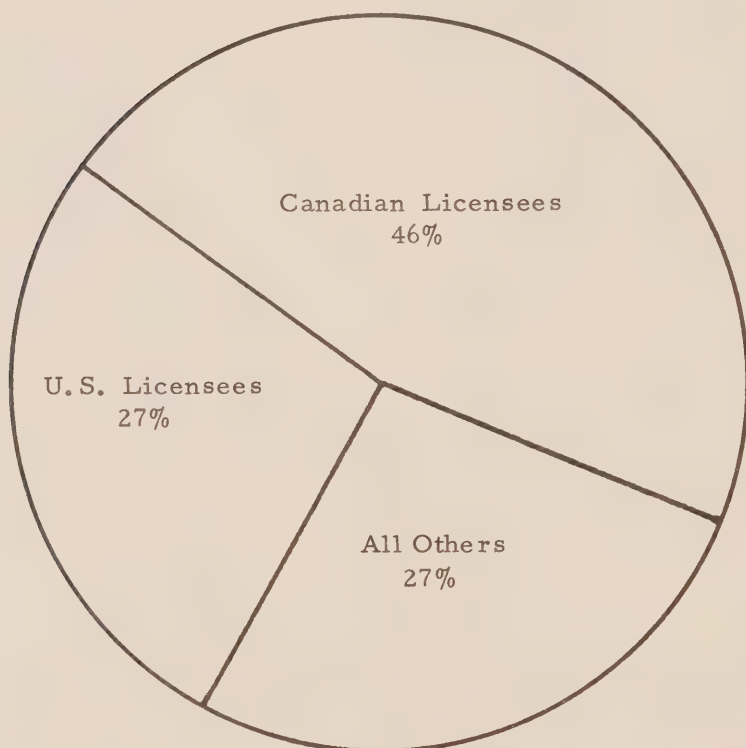


FIGURE 5

LICENSING STATISTICS

(For the period April 1, 1960 to March 31, 1965)

The table lists inventions upon which patent applications were filed during the five-year period--plus two licensed "know-how" cases.

Figures show the number of inventions licensed, not the number of licensing agreements. An invention licensed to several companies counts only once.

Source	Received since April 1, 1960	Licensed	% Licensed
* NRC	94	32	34
* Other Government Departments, Universities, etc.	31	7	23
Department of National Defence	90	16	18
AECL Exploitable ¹	24	5	21
Other	11	0	0
TOTAL	250	60	24

* The Company decides on patent filings.

1 The Company makes patent filings for AECL on their instructions. Most AECL inventions are concerned with details of reactor technology; only a few are considered exploitable by CP&D.



REVIEW OF ACTIVITIES 1966

INCLUDING
EIGHTEENTH
ANNUAL REPORT

CANADIAN PATENTS AND DEVELOPMENT LIMITED

DIRECTORS

B. G. Ballard, President,
National Research Council.

R. E. Jamieson, Professor Emeritus,
McGill University

F. Jarry, President,
Jarry Hydraulics Limited, Montreal.

C. J. Mackenzie,
Consultant, Ottawa.

F. L. W. McKim, Director,
Division of Administration,
National Research Council.

F. T. Rosser,
Vice-President (Administration),
National Research Council.

W. E. van Steenburgh,
Special Scientific Adviser,
Privy Council Office.

F. C. Wallace, President,
Smith and Stone Limited, Toronto.

A. H. Zimmerman, Chairman,
Defence Research Board.

PRESIDENT	F. T. Rosser
VICE-PRESIDENT	F. L. W. McKim
SECRETARY- TREASURER	F. R. Charles
PROMOTION AND DEVELOPMENT	J. R. Johnson J. E. H. Bowles K. G. Lund
PATENTS	J. R. Hughes A. A. Thomson
LEGAL	F. R. Charles P. T. Mitches
ACCOUNTS	H. A. Scharf
ADMINISTRATION	L. Lipke
AUDITOR	The Auditor General
BANKERS	The Canadian Imperial Bank of Commerce
HEAD OFFICE	National Research Council, Montreal Road, Ottawa 7, Canada.



CANADIAN PATENTS AND DEVELOPMENT LIMITED

June 22nd, 1966

The Honourable C. M. Drury,
Chairman of the Committee of the
Privy Council on Scientific and
Industrial Research,
Ottawa, Canada.

Sir,

In accordance with Section 85(3) of the Financial Administration Act, I have the honour to submit, on behalf of the Board of Directors, the annual report of Canadian Patents and Development Limited for the fiscal year ended March 31, 1966. The Company's Financial Statement and the Report of the Auditor General are included.

This year the Company's relationship with other government departments has been strengthened. The Department of Mines and Technical Surveys, which formerly patented and licensed its own inventions, transferred all such work, its licenses, and its staff, to Canadian Patents and Development. The Company and the Department of Industry named liaison officers to promote their common interest in developing Canadian industry.

Canadian Patents and Development Limited acts both as a clearing house and as a sponsor for inventions. It obtains patent protection on ideas that appear valuable and licenses them to industry on a royalty basis. The bridge across the gap between the invention of a scientist and its use by others is often blocked at both ends: the scientist might not wish to digress from his research to develop the idea, while industry might be unwilling to consider it without more evidence of its value. When this situation arises the Company spends its royalties on contracts for the development of inventions.

The Company's income is now so broadly based that after all of its operating expenses are met there is a surplus for development purposes. The royalty income for this year is slightly lower than for last year, but the number of new licenses in prospect would indicate that this drop is temporary and, similarly, commitments already made for development expenditures presage a substantial increase next year.

The operating budget for 1966-67 has been approved by you and the Minister of Finance as required by the Financial Administration Act.

Yours faithfully,

F. T. Rosser,
President.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1966
(with comparative figures as at March 31, 1965)

Assets

	<u>1966</u>	<u>1965</u>
Cash	\$ 195,937	\$ 70,309
Accounts receivable	46,624	68,668
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value, March 31, 1966, \$1,075,395; March 31, 1965, \$1,088,047)	\$1,109,479	1,094,635
Add: Accrued interest	<u>15,235</u>	<u>13,495</u>
	1,124,714	1,108,130
Prepaid promotion and development expense	212,500	--
	<u>\$1,579,775</u>	<u>\$1,247,107</u>

Note

The Company had outstanding commitments amounting to approximately \$66,400 as at March 31, 1966, in respect of a development program.

Approved on behalf of the Board -- F. T. Rosser, Director
F. L. W. McKim, Director

	<u>Liabilities</u>	
	<u>1966</u>	<u>1965</u>
Accounts payable	\$ 267,472	\$ 61,461
Royalties paid in advance	25,200	--
Capital:		
Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance as at April 1, 1965	\$889,447	
Add: Net profit for the year per		
Statement of Income and Expense	<u>101,457</u>	
Balance as at March 31, 1966	<u>990,904</u>	<u>889,447</u>
	1,287,103	1,185,646
	<u> </u>	<u> </u>
	<u>\$1,579,775</u>	<u>\$1,247,107</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 9, 1966, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

A. M. Henderson,
Auditor General of Canada.

Statement of Income and Expense for the year ended March 31, 1966
(with comparative figures for the year ended March 31, 1965)

	<u>1966</u>	<u>1965</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$350,050	\$396,582
Less: costs of licensing rights and related technical assistance, etc.	<u>50,645</u>	<u>34,978</u>
	299,405	361,604
Interest earned	52,903	45,091
Income from agency agreements	15,184	4,153
Miscellaneous income	<u>2,031</u>	<u>104</u>
	369,523	410,952
 <u>Expense</u>		
Salaries	90,599	30,610
Patent attorneys' fees and other patenting costs	85,627	44,210
Promotion and development	50,872	49,761
Services provided by National Research Council	20,000	48,000
Awards to inventors	15,244	17,370
Travel	3,487	999
Legal fees	495	1,841
Miscellaneous	<u>1,742</u>	<u>1,048</u>
	<u>268,066</u>	<u>193,839</u>
Net profit	<u>\$101,457</u>	<u>\$217,113</u>

Note: Salaries for the year 1966 include
directors' fees, \$375 (\$350)



AUDITOR GENERAL OF CANADA

Ottawa, June 9, 1966.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1966. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

A. M. Henderson,
Auditor General of Canada.

SUMMARY OF ACTIVITIES FOR 1965-66THE
COMPANY

completed 15 new licensing agreements;
completed 5 new development contracts;
terminated 6 licensing agreements;
received \$352,799 in royalty payments;
spent \$85,627 on patent prosecution costs;
spent \$45,486 on development contracts;
paid \$15,244 in awards to inventors;
paid \$52,846 as share of royalties to other
organizations;
inherited 62 inventions and 12 licensing
agreements from the Department of
Mines and Technical Surveys.*

- * In August, 1965, the Company took over all work pertaining to the patenting and licensing of inventions from the Department of Mines & Technical Surveys. The department's Patent Officer joined the Company's staff as a Promotion Officer with special responsibility for inventions from his former department.

THE
PATENT
SECTION

received 102 new cases for assessment from NRC,
Government departments and Universities;
received 32 new cases from AECL for study
of patentability;
organized 19 Patent Committee Meetings;
attended 8 AECL Patent Committee Meetings;
filed in various countries 73 patent applications;
supervised the filing by agents of 229 patent
applications;
made 114 searches in the US Patent Office.

THE
PROMOTION
SECTION

received 36 new cases filed by the Patent Section;
received 12 new cases filed by Government de-
partments and agencies;
abandoned 9 cases;
negotiated terms for 23 licensing agreements;
negotiated terms for 7 development contracts;
exhibited at The Production Show, Toronto,
The Canadian Electronics Conference,
The London International Engineering
Exhibition;
made 41 visits to manufacturers; received
210 visits;
revised the Patents Handbook twice (3,300 copies
of each revision were distributed).

The Canadian Government invests heavily in scientific research — in industry, in the universities, and in its own laboratories. (It spent more than \$260 million last year.) The industrial research is in the hands of men who have direct links with the market place, so its results are likely to be used. This is not always true, however, for work in government laboratories and universities, even though industry generally has good contacts with scientists in these areas.

Canadian Patents and Development Limited is a Federal Government Agency set up to encourage the use of ideas from the National Research Council and from the laboratories of other government departments. Under contract, its services have been extended to provincial research organizations and to some universities. It even imports ideas from the United Kingdom, Australia, India, and South Africa under exchange agreements. It does not, however, handle the ideas of private citizens.

CP&D collects ideas, evaluates them, and files patent applications on cases considered valuable. A few cases have been licensed on a "know-how" basis because they were unpatentable, or because the potential market was too small either to attract competition or to repay patent costs. But generally patents are the key to the Company's operation — they provide the protection that encourages industry to spend time and money developing a new product or process.

Employees of government departments and agencies come under the Public Servants Inventions Act. Any inventions they make normally belong to the Government and can be assigned to CP&D. Those whose inventions are licensed may receive a portion of the royalty income — before patent costs and other expenses are recovered. Nevertheless, one of the Company's problems is to ensure that it finds out about novel ideas and laboratory gadgets developed by the scientist.

An essential part of CP&D's job is to maintain a good communication with the working scientist. For example, a chemist observed that a fluid suspension in a test tube settled much more quickly when the tube was tilted. He might easily have assumed that the idea was old, and dismissed it; but he mentioned it to one of the Company's patent officers. A search in both the Canadian and U.S. Patent Offices turned up no previous disclosure. CP&D obtained patents on the idea and has licensed them for use in industrial waste disposal.

Since it was founded in 1948, the Company has granted more than 260 licenses. In the past five years it has earned more than \$1.8 million in royalties. (By rough calculations this corresponds to more than \$60 million in sales).

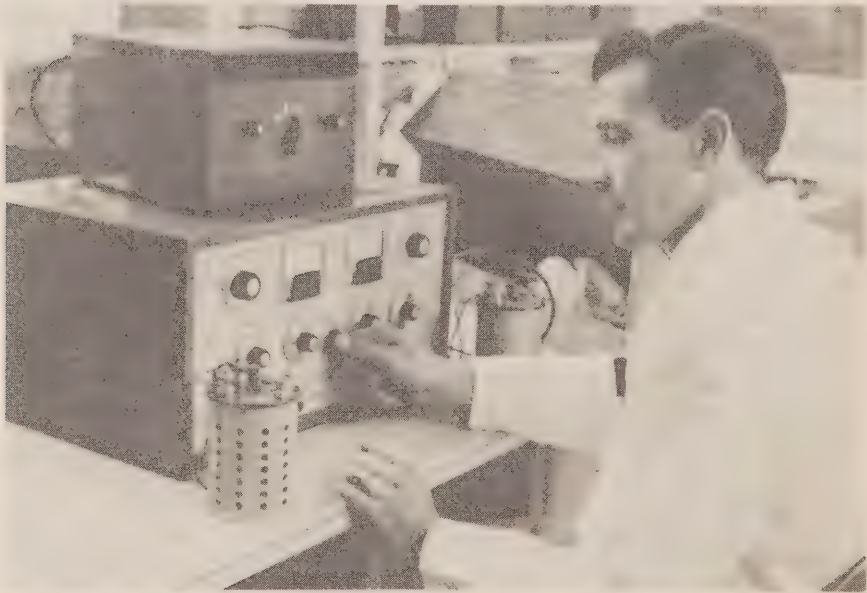
CP&D's inventions differ widely in the size and value of their potential markets, and in the breadth of their possible patent coverage. Very few are consumer products. Many are highly specialized scientific devices. Some are processes having a wide range of possible applications. The Company's job is to get them into use or into production in Canada, if possible, and if this is not possible, to license them elsewhere for a maximum financial return.

In licensing, CP&D acts as liaison between inventors and businessmen. This is not just a matter of carrying and translating messages, but of imagining uses for new ideas, and publicizing them and bringing them to the attention of prospective users. Since industry is being asked to risk its own money, it is important not to oversell.

The Company normally files patent applications before publicizing an invention. And it tries to avoid spending large sums on obtaining patents for which the market is uncertain unless there is a chance that such expenditure might help create a new industry in Canada, or a new export market, or be otherwise in the public interest. But the Company must avoid the error of taking no risks and filing only on the obviously valuable.

At the same time, it is becoming more necessary to assess inventions carefully because patenting costs are rising. This year substantial increases were made in the scales of fees in the patent offices of Canada and the United States, the two countries where CP&D files most of its patent applications. In Canada the fees for a patent of average length and complexity were more than doubled; in the U.S. they were quadrupled. The fees paid to patent agents for making up and prosecuting patent applications have also risen appreciably over the last few years.

In recent years CP&D has licensed slightly more than a third of the ideas on which it filed patent applications. Some of the inventions that have been successfully developed and produced in recent years are:



Isolating Potential Comparator

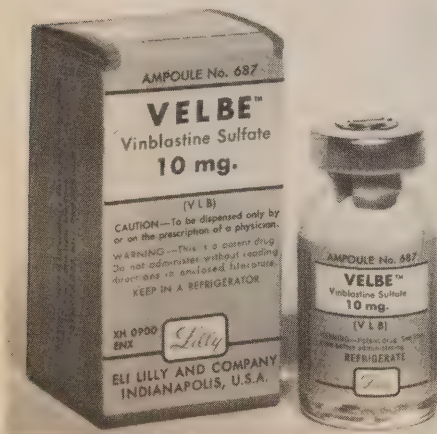
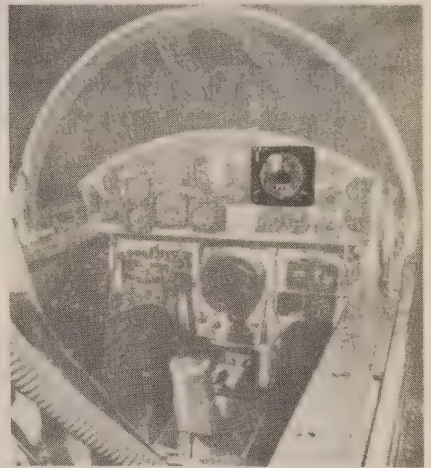
One of the very accurate electrical measuring devices invented at NRC and manufactured by Guildline Instruments Ltd., Smiths Falls, Ontario. Guildline has earned an international reputation; most of its production is exported.



Position and Homing Indicator

The PHI, shown here in a CF 104, automatically keeps track of an aircraft, giving the pilot a continuous bearing and distance to his own base or to alternative targets. The PHI is used by 13 national air forces.

Computing Devices of Canada Ltd. developed it in collaboration with the Department of National Defence. Sales by CDC and its sublicensees total about \$100 million.



Vincalukoblastine

Scientists at the University of Western Ontario isolated this alkaloid from the periwinkle, a garden shrub widely used as a folk remedy.

They collaborated with a group doing similar work at The Lilly Research Laboratories to produce enough for clinical trials, which showed it to be effective in the treatment of Hodgkin's disease, leukemia and some cancers.



Invented at NRC, the large-cup ear defender with fluid-filled cushion is now a common sight in noisy workplaces around the world. It is manufactured in Canada, Britain and the United States.



The Voyager, Canadian Marconi Company's fully transistorized marine radar, grew from an NRC design.

APPENDIX A

DEVELOPMENT PROJECTS

DEVELOPMENT PROJECTS

To many people, "invention" suggests the safety pin, penicillin, the transistor, nylon - radical new ideas, things that didn't exist before. But most inventions are not like that; they are improvements in products or processes that already exist - their value is a matter of relative efficiency or relative cost.

Occasionally CP&D is called upon to prove the value of its new ideas. To get figures for comparison it may be necessary to carry out expensive trials and tests. CP&D therefore spends some of its profits on contracts for the development of promising inventions. In other cases small manufacturers require assistance in developing and producing prototypes during the expensive period before sales begin. By spending relatively small sums to support this work, CP&D can both encourage and hasten the adoption of new ideas.

The development contracts that have been active this year are:

VASCULAR SUTURING INSTRUMENT

a surgical instrument for joining severed blood vessels, that enables a surgeon to make blood tight joints very quickly, even in very small vessels.

The license on this invention has been taken over by a new licensee. CP&D has agreed to support the introduction of design modifications and the development of production techniques for the commercial models.

WINDSHIELD RAIN REPELLENT

chemicals for treating glass or plastic so that they cannot be wetted. Without such treatment rain can totally obscure vision or produce, in aircraft, an apparent lowering of the horizon and the dangerous illusion of increased altitude.

The chemicals are used in extremely small quantities and they are expensive and difficult to prepare. CP&D assumed responsibility for obtaining a large number of kits for trials by the RCAF and arranged for their production by Ontario Research Foundation. The invention is now licensed for commercial use, and the experience gained by ORF in this first production is being made available to the licensee.

SELECTIVE AGGLOMERATION

a technique that allows rapid, efficient, and selective removal of solids from liquid suspensions. It is extremely versatile and shows promise for extracting minerals and upgrading ores, for separating and recovering industrial wastes and for pelletizing materials.

CP&D is supporting a staff working with the inventors at the National Research Council. It also has a contract with Queen's University for pilot plant studies in the Metallurgical Engineering Department leading to the design of process equipment.

POLYVALENT SOMATIC ANTIGEN VACCINES



a method of producing vaccines, developed by the Department of National Health and Welfare.

CP&D shared the costs of acceptance trials in Canada and the United Kingdom, of a vaccine against Mastitis in cattle. The material has been accepted in both countries and the United States; it is now on the market.

WAVEGUIDE TUNING PROBE

a method of mounting stub tuners that prevents leakage of energy from the waveguide.

CP&D is supporting the design and construction of tuners in a range of sizes.

MAGNETIC CLUTCH

a new idea for a small clutch.

CP&D is paying to have a practical design worked out and prototype built.

NAVIGATION BEACON

a beacon system that would facilitate pilotage of ships through confined waterways under conditions of poor visibility.

CP&D is paying for the development of a practical system, through to the production of equipment for trials on shipboard.

TRANSPONDER BEACON

a device that generates artificial radar echoes to enable radar to track small objects at long range. This one was designed for use with the Canadian Black Brant family of rockets.

CP&D has agreed to share, with its licensee, the cost of developing a versatile commercial unit.

NOTE: This list does not include certain licensing agreements that call for proof of minimum annual expenditures on development work.

APPENDIX B

GRAPHICAL INFORMATION

FIGURE 1

ANNUAL INCOME AND EXPENSE

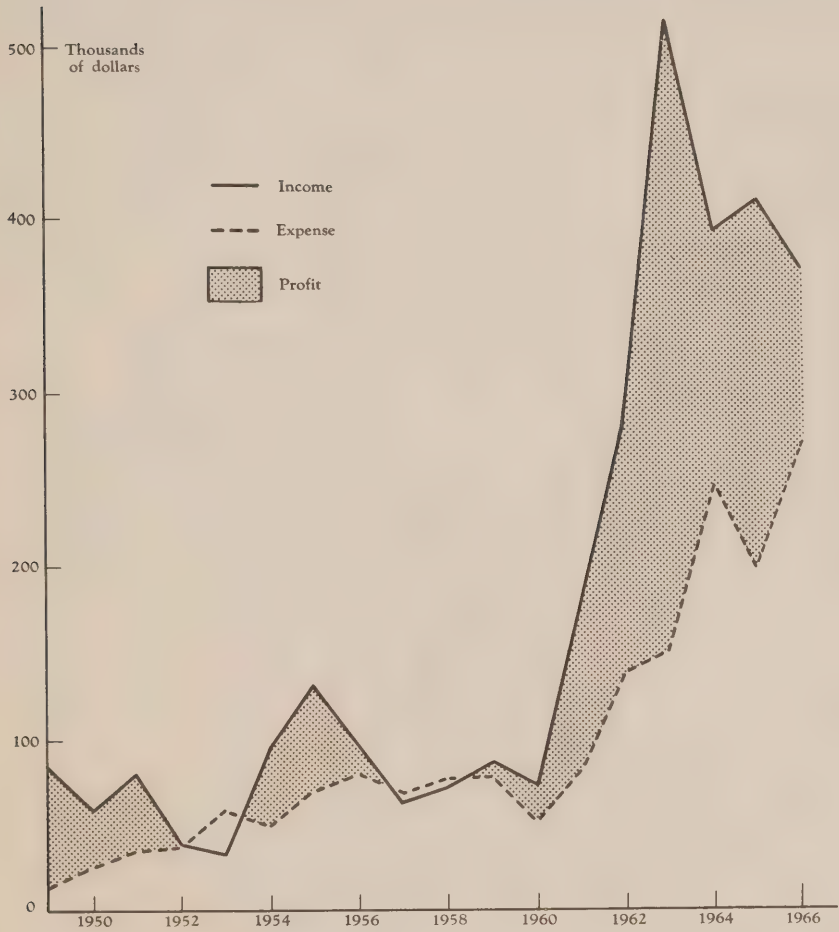


FIGURE 2

ROYALTY INCOME FOR THE PAST NINE YEARS

The chart shows net royalty income, and the proportion due to the most profitable license. Figures in brackets indicate the total number of profitable licenses.

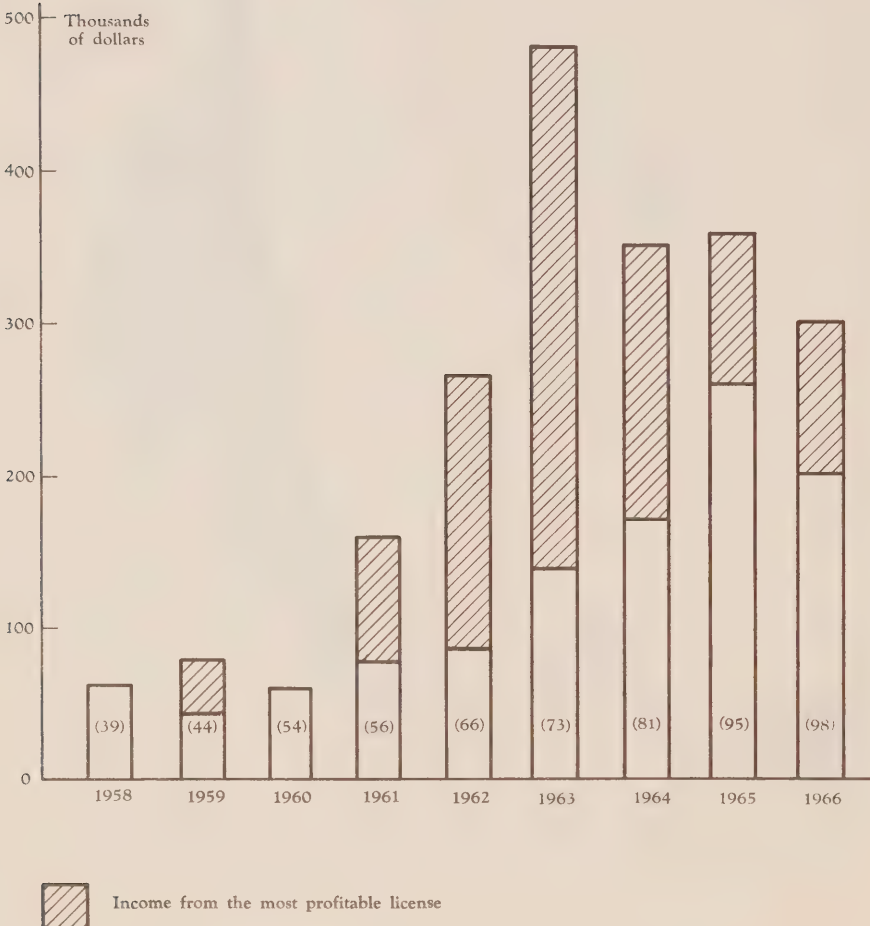


FIGURE 3

LICENSING AGREEMENTS

The effective lifetime of some licensing agreements is much less than the 17 years for which patent rights exist; every year, therefore, a few agreements are cancelled. In addition, the Company is now old enough for some early agreements to end because all the patent rights have expired.

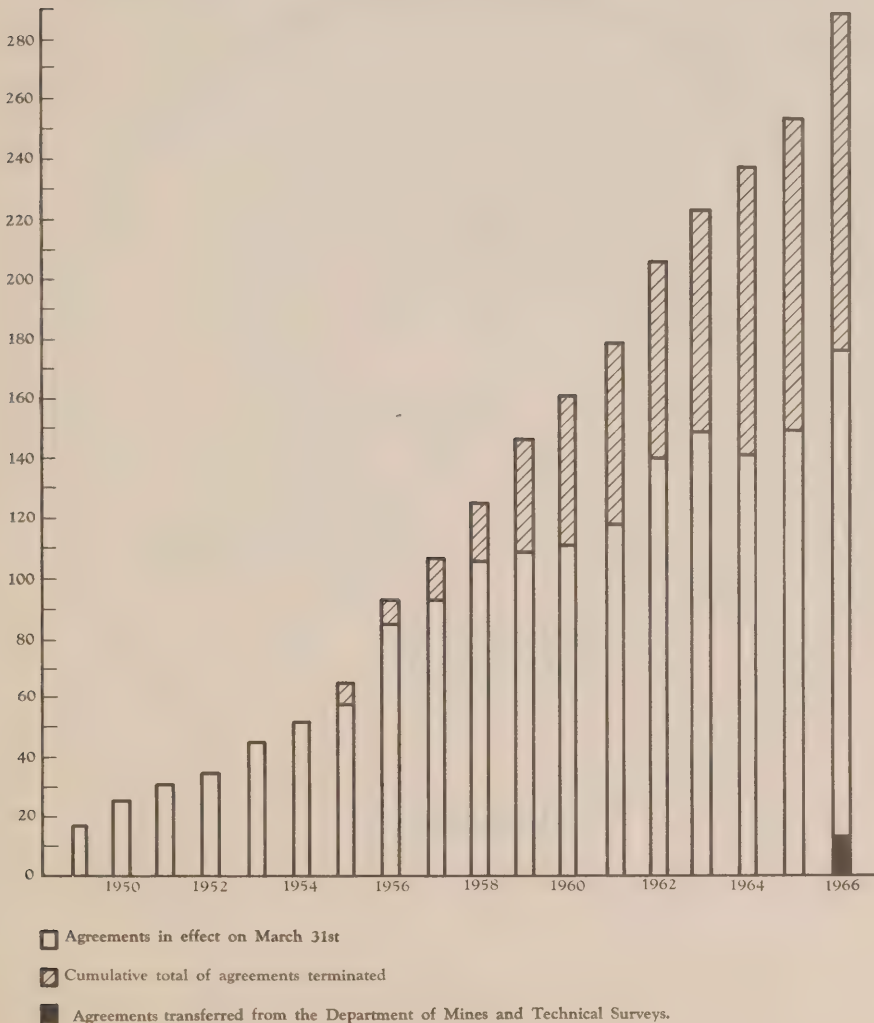
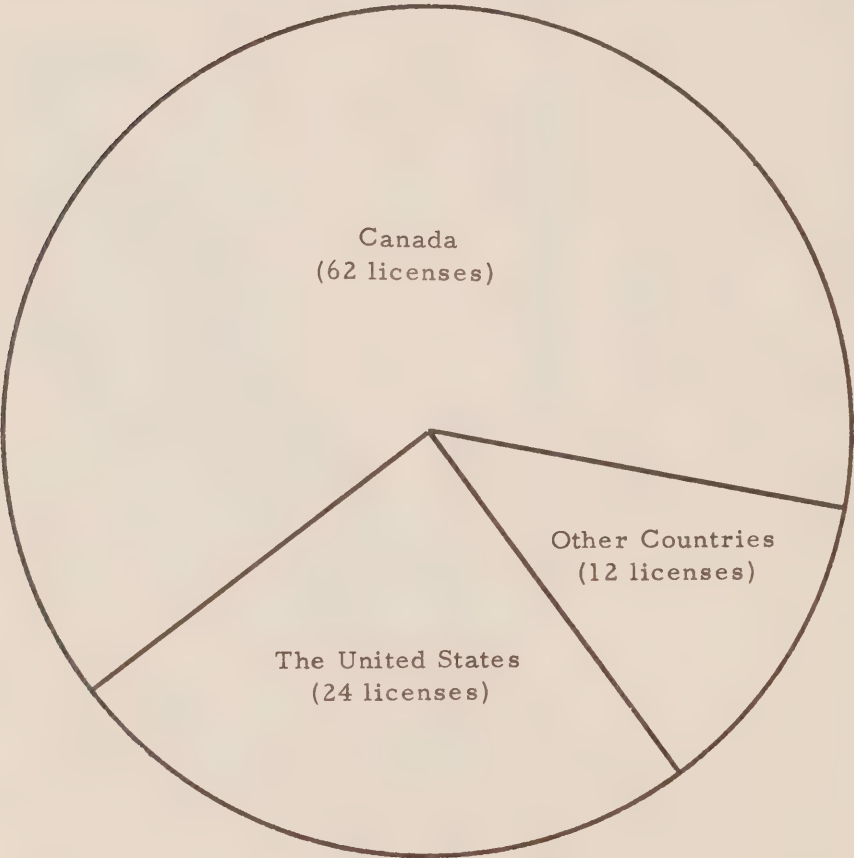


FIGURE 4

DISTRIBUTION OF LICENSES

Most of the 98 licensing agreements that produced revenue this year are with companies manufacturing in Canada.



A56



Consult

**NINETEENTH
ANNUAL REPORT
1967**

ANNUAL REPORT
1967

CANADIAN PATENTS AND DEVELOPMENT LIMITED

DIRECTORS

B. G. Ballard, President,
National Research Council

J. P. Drolet,
Assistant Deputy Minister (Mines),
Department of Energy, Mines
and Resources

*F. Jarry, President,
Jarry Hydraulics Limited,
Montreal

F. L. W. McKim,
Director of Administration,
National Research Council

S. S. Reisman,
Deputy Minister,
Department of Industry

F. T. Rosser,
Vice-President (Administration),
National Research Council

K. F. Tupper,
Vice-President (Scientific),
National Research Council

F. C. Wallace, President,
Smith and Stone Limited,
Toronto

A. H. Zimmerman,
Chairman,
Defence Research Board

*resigned September 1, 1966

OFFICERS

President	F. T. Rosser
Vice-President	F. L. W. McKim
General Manager	C. L. Annis
Secretary- Treasurer	F. R. Charles

BRANCHES

Promotion and Development	J. R. Johnson, Chief K. G. Lund J. E. H. Bowles J. H. B. Chenier
Patents	J. R. Hughes, Chief A. A. Thomson P. T. Mitches
Comptroller	F. R. Charles, Comptroller H. A. Scharf
Legal Administration	W. D. Gordon L. Lipke

Auditor	The Auditor General of Canada
Bankers	The Canadian Imperial Bank of Commerce
Head Office	National Research Council, Montreal Road, Ottawa 7, Canada.



CANADIAN PATENTS AND DEVELOPMENT LIMITED

27 June 1967.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

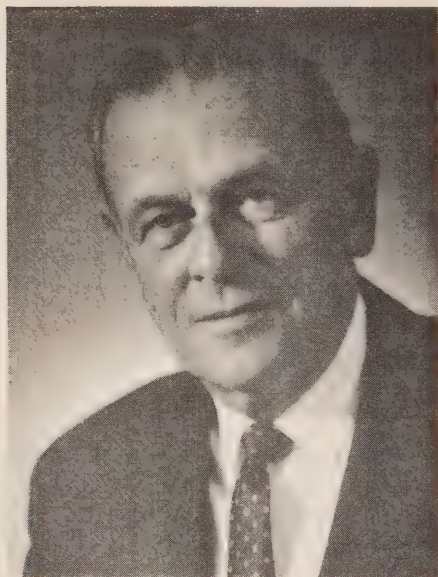
Sir,

In accordance with Section 85(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year ended March 31, 1967. The Company's Financial Statement and the Report of the Auditor General are included.

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the potential benefits from inventions arising from publicly-financed and publicly or institutionally-performed research.

CPDL was brought into being by the National Research Council of Canada (NRC) in 1947 to handle inventions which had accumulated largely from NRC research during the Second World War. To this end CPDL examined inventions for patentability, made filings for patents in the patent offices of various countries on those inventions which were deemed to qualify, developed alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential

licensees, promoted and licensed inventions to industry, collected royalties, thereon, and from these provided cash awards to the inventors, defrayed costs of CPDL's operations and used its funds to assist in further development of inventions.



DR. F. T. ROSSER

In 1948 it was proclaimed that the Government Companies Operation Act was applicable to CPDL and in the same year the Company accepted the handling of inventions arising from government departments other than NRC. The first such department was the Department of Reconstruction and Supply. In the same year CPDL made provision for entering into agreements with universities, at the request of the university in each case, to handle their patentable or possibly-patentable material.

In 1951 CPDL concluded its first agreement to handle the patenting, development, promotion and licensing of inventions for a provincial research organization.

In 1952 CPDL entered into an agreement with the National Research Development Corporation of the United Kingdom whereby in return for a percentage of any royalty income received each would handle the promotion of certain cases belonging to the other. Agreements have since been made with similar government organizations in Australia, India and South Africa. The creation of these latter organizations was modelled largely on CPDL.

The enactment of the Public Servants Inventions Act in 1954 by the federal government which, inter alia, specified that Ministers were empowered to transfer the administration and control of inventions to our Company opened the way to CPDL becoming the Canadian government's prime patenting and licensing agency.

Today CPDL is eligible to accept and handle the administration and control of inventions arising in all Canadian government departments and agencies. Over the years CPDL has, in fact, received inventions from 25 out of a total of over 100 such departments and agencies. In addition the Company has Agreements with 17 Canadian universities and colleges - one such Agreement being added last year - and with five provincial research organizations.

We are not at all sure that researchers in Canada are fully conscious of the importance both to their own benefit and to the benefit of the Canadian economy of disclosing any possibly patentable discoveries first into the patent system. During the year CPDL began a program to inform researchers of the importance of disclosing possibly patentable material first into the patent system.

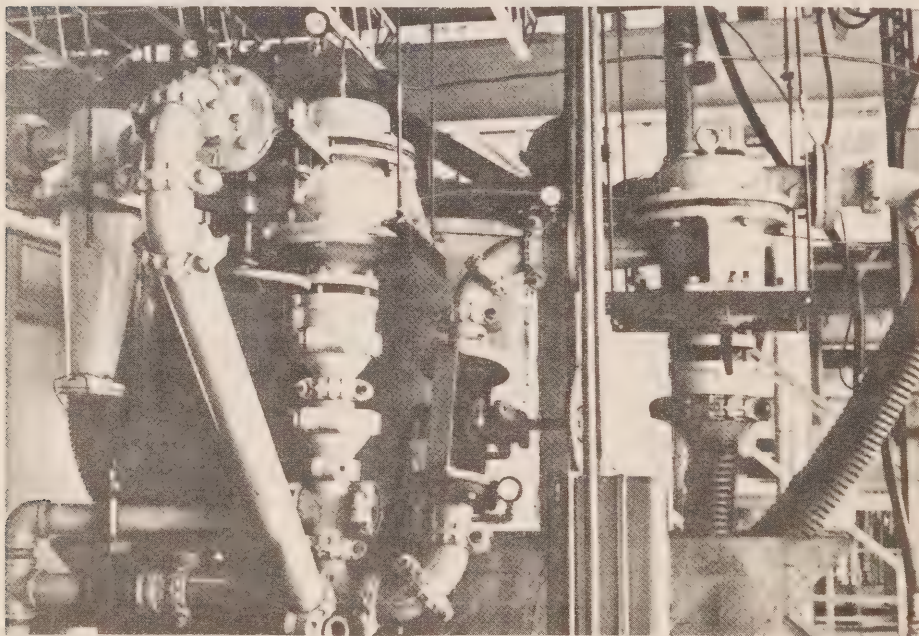
As at 31st March 1967 CPDL had received, from all sources, an accumulated total of 2073 proposals for patent, of which 158 were received during 1966-67. This was an increase of nearly 20% over the previous year and was somewhat higher than the average increase over the past few years. Each of these proposals required careful screening and appraisal prior to decision on whether to file an application for patent and, if so, in which country first. Subsequently decisions will be required on which additional countries, if any, to apply for patent on each invention; and, still later, on whether paying the annual renewal fees on each patent in each country is still worth while. Later still a question may arise on any patent of whether it is worth the litigation costs to assert or to defend it in any country.

By the end of 1965-66 it was clear that the workload of CPDL was showing a steady growth and had already reached a level which called for the provision of a General Manager to be

the chief executive officer of the Company; and for a compatible reorganization and some other additions to the staff. Accordingly a General Manager was appointed effective 1 September 1966. During the remainder of the fiscal year a great deal was accomplished in consolidating policies, in distributing and coordinating duties among the staff, in systemizing procedures based on the accumulation of experience acquired by the Company over the years, and in otherwise streamlining the Company's operations. We are confident that this will enable CPDL to continue furnishing prompt handling of proposals for patent on the one hand and maximum attention to the development, promotion and licensing of inventions to industry on the other.

I mentioned earlier that CPDL last year received 158 proposals for patenting. Of these 49 originated with the National Research Council, 37 with Atomic Energy of Canada Limited (AECL), 34 in other government departments and agencies, 31 in universities and colleges and seven from provincial research organizations. During the year CPDL filed first applications for

(Continued on Page 15)



COMPOUND WATER CYCLONES
IN USE ON A COAL CLEANING PLANT

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS

Ottawa, June 1, 1967.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1967. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

A. M. Henderson,
Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED

11

Statement of Income and Expense for the year ended March 31, 1967
(with comparative figures for the year ended March 31, 1966)

	<u>1967</u>	<u>1966</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$ 392,839	\$ 350,050
Less: costs of licensing rights and related technical assistance, etc.	43,610	50,645
	<u>349,229</u>	<u>299,405</u>
Interest earned	53,514	52,903
Income from agency agreements	18,844	15,184
Miscellaneous income	-	2,031
	<u>421,587</u>	<u>369,523</u>
 <u>Expense</u>		
Promotion and development, including \$70,000 prepaid promotion and development expense written off	143,142	50,872
Salaries	140,293	90,599
Patent attorneys' fees and other patenting costs	78,170	85,627
Awards to inventors	20,202	15,244
Services provided by National Research Council	20,000	20,000
Travel	4,642	3,487
Legal fees	4,297	495
Office supplies	3,441	-
Provision for doubtful account	500	-
Miscellaneous	2,743	1,742
	<u>417,430</u>	<u>268,066</u>
Net profit	<u>\$ 4,157</u>	<u>\$ 101,457</u>

Note: Salaries for the year 1967
include directors' fees,
\$300 (\$375)

CANADIAN PATENTS A
(Incorporated under th

Balance Sheet
(with comparative fig

	<u>Assets</u>	
	<u>1967</u>	<u>1966</u>
Cash	\$ 75,064	\$ 195,937
Accounts receivable	37,873	46,624
Less: Allowance for doubtful account	<u>500</u>	<u>-</u>
	37,373	46,624
Interest accrued on investments	15,507	15,235
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value, March 31, 1967, \$1,101,604; March 31, 1966, \$1,075,395)	1,108,447	1,109,479
Prepaid promotion and development expense	142,500	212,500
	<u>\$1,378,891</u>	<u>\$1,579,775</u>

Note:

The Company had outstanding commitments amounting to approximately \$67,800 as at March 31, 1967, in respect of a development program.

Approved on behalf of the Board

(sgd) F. T. Rosser. . . .
Director

(sgd) F. McKim
.....
Director

DEVELOPMENT LIMITED
(Incorporated in Canada under the Companies Act)

March 31, 1967
(as at March 31, 1966)

Liabilities

	<u>1967</u>	<u>1966</u>
Accounts payable	\$ 86,281	\$ 267,472
Royalties paid in advance	1,350	25,200
Capital:		
Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance as at April 1, 1966	\$ 990,904	
Add: Net profit for the year per		
Statement of Income and Expense	<u>4,157</u>	-
Balance as at March 31, 1967	<u>995,061</u>	<u>990,904</u>
	1,291,260	1,287,103
	<u>\$1,378,891</u>	<u>\$1,579,775</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 1, 1967, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

A. M. Henderson,
Auditor General of Canada.



THE PERFORATED BREAKWATER AT BAIE COMEAU

patent on 70 different inventions, made 180 further applications in additional countries, and continued the prosecution on over 500 previously filed applications. CPDL has made applications for patent in 58 different countries all told.

About 40% of last year's filings were done by CPDL's own patent staff and the remainder of the work was let out among 13 Canadian patent agent firms.

CPDL files first applications for patents in the United States on a substantial proportion of its inventions. As a result we have been following with close attention the progress of the Bill proposing amendments to the U. S. patent system which was introduced in the United States Congress. If the Bill is passed, and particularly the section which allows no grace period (instead of the one year as at present) in which to file application for patent after open publication has been made about a discovery it may present difficulties for CPDL. It will require the active co-operation of Canadian researchers as well as seeming to portend a sharp uploading of the demands on CPDL's patent branch.

As at 31 March 1967 our patent branch had directly or through patent agent firms over the years obtained patents on 594 different inventions and patent was pending on 309 more.

It should be explained that whereas CPDL handles the patenting of most AECL inventions AECL pays the costs and retains the title. At the time CPDL files application for patent our development and promotion staff makes an assessment on whether the invention is suitable for commercial exploitation. During the past fiscal year CPDL undertook commercial exploitation of four of the total of 37 AECL inventions which were offered. The remainder were directly related to nuclear reactor technology and are exploited by AECL.

It should also be explained that the Department of National Defence (DND) handles the patenting of all inventions arising in DND. The administration and control of those inventions which in DND's opinion are releasable for commercial exploitation are turned over to CPDL who pays for the patenting

and renewal costs in all countries beyond those where the patenting is needed for military purposes.

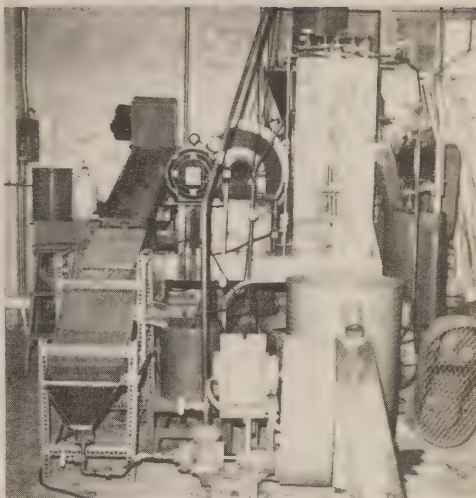
The life of a patent in most countries is approximately 17 years and the patents which were in CPDL's early holdings are now expiring at an increasing rate. In some other cases the older patents have been superseded by improvements and are no longer marketable.

Turning now to last year's activities in the development, promotion and licensing of inventions I should first observe that nearly all our inventions come from publicly-funded, research oriented sources which are neither organized nor have funds made available to carry a discovery - whether it be a device, process or substance - very far past the research stage along the development road towards readiness for general use. Thus, in marketing an invention, our Company commonly has to assess the nature and amount of development that will be required to put it into production. In many cases the licensee will be willing or can be persuaded to include the necessary development in the license agreement and, in these, CPDL provides opportunity for the licensee to recover his costs by granting him exclusive rights for an appropriate period or by making allowances in the royalty rates. On other occasions it will pay part of the development costs. In order to accomplish its Object of making the benefits of inventions "more available to the public" our Company will, in some instances, arrange the creation of pilot-scale facilities for verification and demonstration purposes or the production and distribution of prototypes to potential users, to the point that licensees can be found who will carry the development onwards into full-scale use or production.

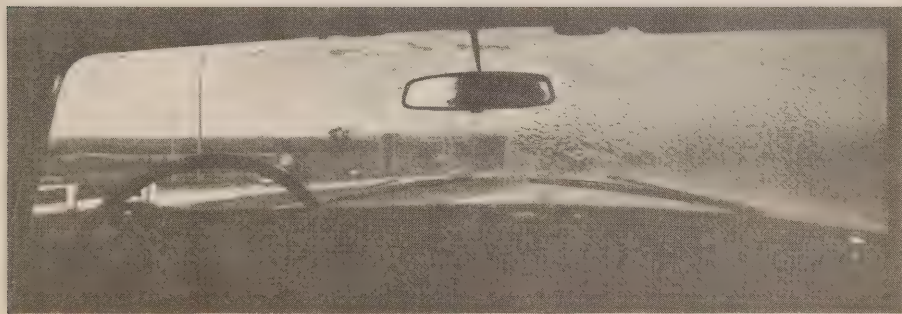
During 1966-67 our Company either financed or assisted in the direct financing of exploratory development on two processes and the more specific development of seven others. One of the processes is called "Selective Agglomeration", an extremely versatile technique that allows rapid, efficient and selective removal of solids from liquid suspensions. The other such process is microwave drying. This technique appears to have potential applicabilities to a wide range of production processes in which products require rapid and uniform drying, for example photographic film.

Among the other development projects on which CPDL-financed work was continued or initiated during last year was one on disposable plastic staple bushings for the suturing instrument which has been the subject of earlier development. This instrument enables a surgeon to make blood tight joints very quickly even in very small blood vessels. The disposable bushings will greatly speed the preparation of the instrument for use in and during surgery. Another was the final stages in CPDL-sponsored pre-

production and trials of a durable repellent to enable clear view through glass or plastic even in heavy rain. The reports thus far have been highly encouraging. A third was on a method of mounting stub tuners to prevent leakage of energy from a waveguide. Another was on a new design for a small clutch using permanent magnets. A navigation beacon that will facilitate pilotage of vessels through confined waterways was the subject of another, and development also progressed on another type of beacon, this one being a device to enhance radar tracking of small objects at long range.



AGGLOMERATION PILOT PLANT
AT QUEEN'S UNIVERSITY



RAIN REPELLENT - EFFECT OF HEAVY RAIN ON TREATED
AND UNTREATED PORTIONS OF A WINDSHIELD

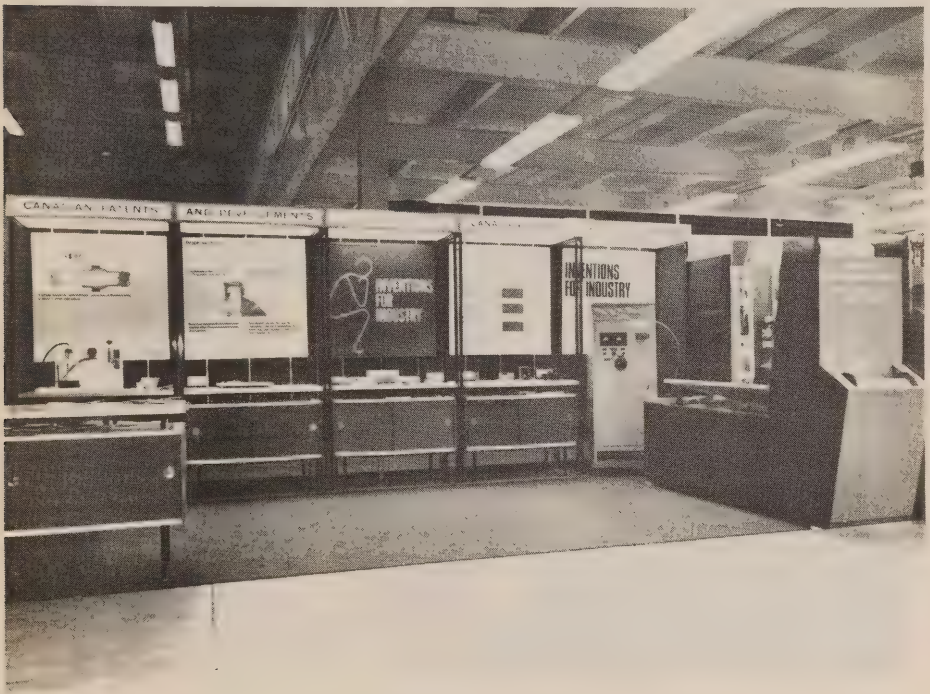


CRASH POSITION INDICATOR
MOUNTED ON A KC135 AIRCRAFT

Our Company's development and promotion branch is free to begin the active promotion of an invention as soon as the authority for administration and control of the invention has been transferred to us and the first application for patent on it has been filed. During the past year 59 inventions thus became available for promotion. Included among these were six patents in which our Company acquired Canadian rights largely in order to protect and increase the value of CPDL's existing patents on a companion product. These additions coupled with the expired and superseded cases which I mentioned earlier left CPDL with 672 inventions at year's end for which licensees were being sought. During the year 34 inventions were licensed to industry, several as a result of negotiations begun in the previous year or earlier. At 31st March 1967 CPDL had licenses in force on a total of 232 inventions. The year ended with negotiations on a further 22 inventions in progress. Among the discoveries on which licensing negotiations were conducted during 1966-67 was the antibiotic Myxin which was the subject of extensive press and radio publicity.

Our Company exhibited in four trade shows, two in Canada and two in the United States. The latter two comprised a portion of a larger exhibit organized by the Department of Trade and Commerce. Our exhibits have all drawn strong interest from representatives of the industries which attended and have proven to be very worth while. Throughout the year our promotion activity was well sustained and the interest in our inventory of patents remained brisk. All indications suggest that this will continue throughout the coming year and that the addition to our staff during the year of an officer specializing in the promotion of inventions in the chemical field was well justified. We believe our promotional staff is now well balanced.

During the year claims of infringements on certain of our patents in the U. K., West Germany and Belgium were brought to attention. It is hoped that satisfactory settlements



THE COMPANY'S BOOTH AT THE PRODUCTION SHOW 67



GEMINI CAPSULE SHOWING 'STEM' ANTENNA

can be achieved without having to resort to litigation. In addition it was alleged near the end of the year by another of our licensees that infringements were occurring in Canada and the United States on two other patents.

Turning finally to our Company's Financial Statement and the Report of the Auditor General thereon you will note in the Statement of Income and Expense that whereas income rose by \$52,064 and expense by \$149,364, compared with 1965-66, the expense included an amount of \$70,000 used towards reduction of Prepaid Development and Promotion Expense. Thus the Company's actual operating profit for the year was \$74,157. This compares with an operating profit in 1965-66 of \$101,457. We are confident that the increased expense during 1966-67 for staff salaries and office equipment will be more than offset by improved services and increased revenues in the future.

In retrospect we are proud that our Company in 1966-67 again made substantial achievements in line with its Object and was once more able to do so without cost to the Canadian public.

In accordance with the Financial Administration Act the Company's operating budget for the 1967-68 fiscal year has been approved by you and the President of the Treasury Board.

Yours faithfully,

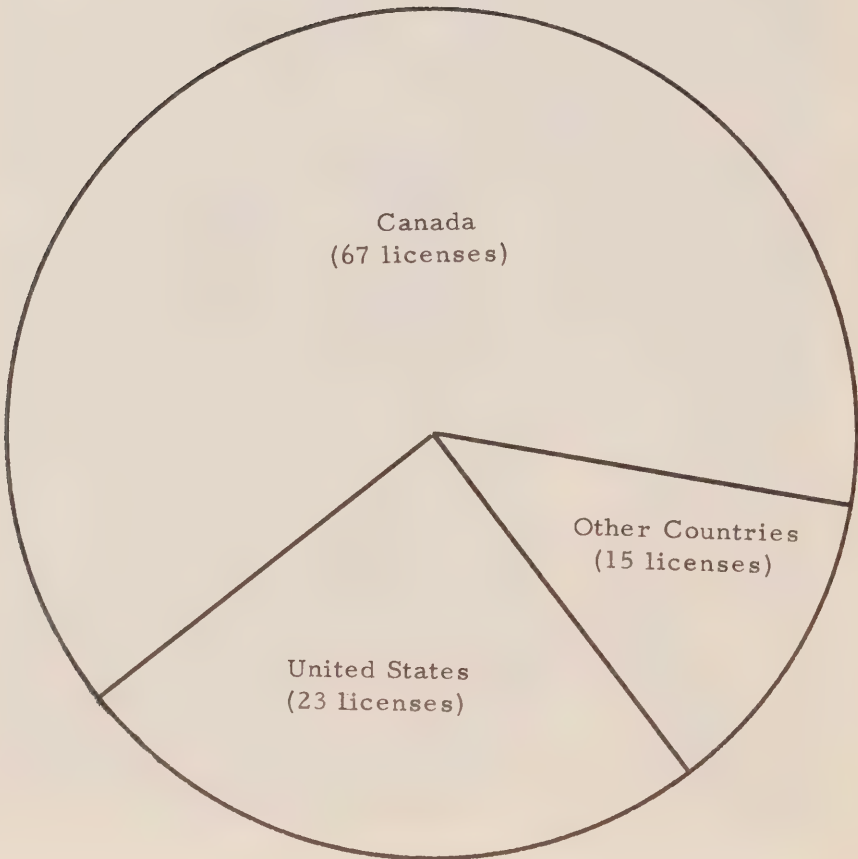
A handwritten signature in dark ink, appearing to read 'F. T. Rosser', written over a horizontal line.

F. T. Rosser,
President.

ANNUAL REPORT

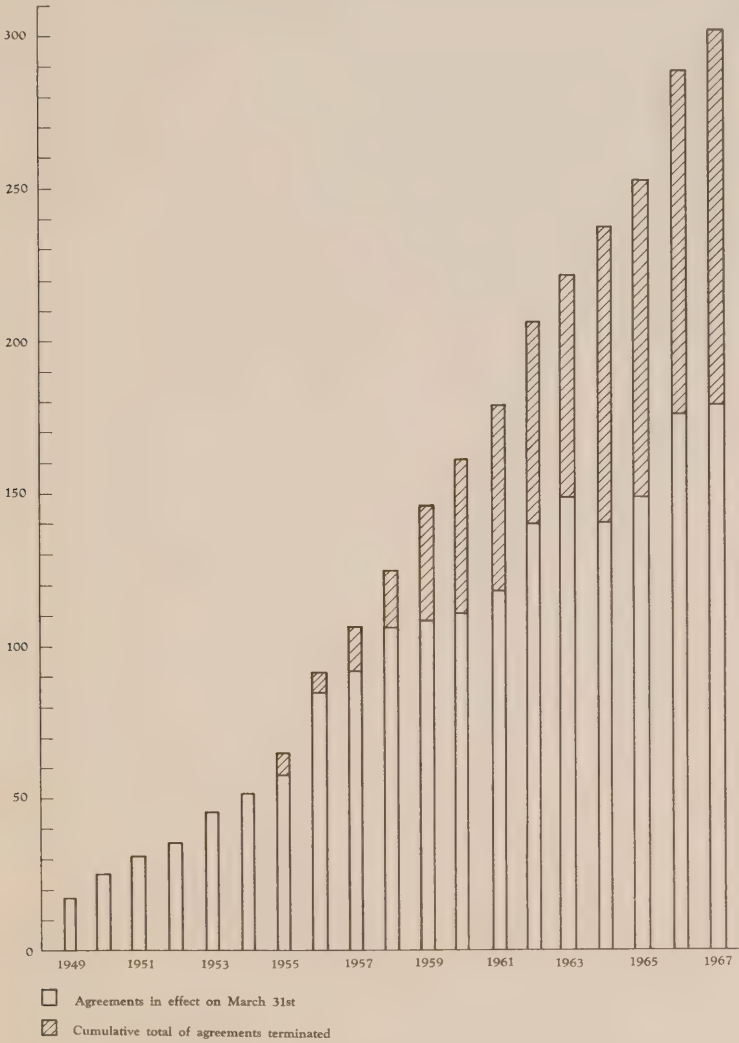
DISTRIBUTION OF LICENSES

Most of the 105 license agreements that produced revenue this year are with companies manufacturing in Canada.



LICENSE AGREEMENTS

The effective lifetime of some license agreements is much less than the 17 years for which patent rights exist; every year, therefore, a few agreements are cancelled. In addition, the Company is now old enough for some early agreements to end because all the patent rights have expired.





A56



TWENTIETH
ANNUAL REPORT
1968

ANNUAL REPORT
1968

CANADIAN PATENTS AND DEVELOPMENT LIMITED

DIRECTORS

B. G. Ballard,
President¹
National Research Council

J. P. Drolet,
Assistant Deputy Minister,
Department of Energy, Mines
and Resources

P. R. Gendron,
Vice-President and General Manager,
Eastern Division,
Canadian Breweries Limited,
Montreal

F. L. W. McKim,
Director, Administration and Personnel,
National Research Council

S. S. Reisman,
Deputy Minister,
Department of Industry

F. T. Rosser,
President,
Algonquin College

W. G. Schneider,
President,
National Research Council

K. F. Tupper,
Vice-President (Scientific),
National Research Council

R. J. Uffen,
Chairman,
Defence Research Board

F. C. Wallace,
President,
Smith and Stone Limited,
Toronto

A. H. Zimmerman,
Chairman,²
Defence Research Board

¹ retired as President NRC 31 Aug 67

² retired as Chairman DRB 1 Mar 67
deceased 31 Oct 67

OFFICERS

President	B. G. Ballard
Vice-President	F. L. W. McKim
General Manager	C. L. Annis
Secretary-Treasurer	F. R. Charles

BRANCHES

Development and Promotion	J. R. Johnson, Chief K. G. Lund J. E. H. Bowles J. H. B. Chenier ¹ R. A. Pacaud
Patents	J. R. Hughes, Chief A. A. Thomson F. W. Lemon P. T. Mitches ²
Comptroller	F. R. Charles, Comptroller H. A. Scharf
Legal	W. D. Gordon
Administration	L. Lipke

AUDITOR

The Auditor General of Canada

BANKERS

The Canadian Imperial Bank of
Commerce

HEAD OFFICE

National Research Council of Canada,
Montreal Road,
Ottawa 7, Canada.¹ resigned 8 Mar 68² resigned 31 Jan 68



CANADIAN PATENTS AND DEVELOPMENT LIMITED

24 June 1968

The Honourable C. M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Sir,

In accordance with Section 85(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year ended March 31, 1968. The Company's Financial Statement and the Report of the Auditor General are included.

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the patentable products of publicly financed and publicly or institutionally-performed research.

CPDL was brought into being by the National Research Council of Canada (NRC) in 1947 to handle inventions which had accumulated largely from NRC research during the Second World War. To this end CPDL examined inventions for patentability, made filings for patents in the patent offices of various countries on those inventions which were deemed to qualify, developed alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential

licensees, promoted and licensed inventions to industry, collected royalties, thereon, and from these provided cash awards to the inventors, defrayed costs of CPDL's operations and used its funds to assist in further development of inventions.



DR. B.G. BALLARD

In 1948 it was proclaimed that the Government Companies Operation Act was applicable to CPDL and in the same year the Company accepted the handling of inventions arising from government departments other than NRC. The first such department was the Department of Reconstruction and Supply. In the same year CPDL made provision for entering into agreements with universities, at the request of the university in each case, to handle their patentable or possibly-patentable material.

In 1951 CPDL concluded its first agreement to handle the patenting, development, promotion and licensing of inventions for a provincial research organization.

In 1952 CPDL entered into an agreement with the National Research Development Corporation of the United Kingdom whereby in return for a percentage of any royalty income received each would handle the promotion of certain cases belonging to the other. Agreements have since been made with similar government organizations in Australia, India and South Africa. The creation of these latter organizations was modelled largely on CPDL.

The enactment of the Public Servants Inventions Act in 1954 by the federal government which, inter alia, specified that Ministers were empowered to transfer the administration and control of inventions to our Company, opened the way to CPDL becoming the Canadian government's prime patenting and licensing agency.

Today CPDL is eligible to accept and handle the administration and control of inventions arising in all Canadian government departments and agencies. Over the years CPDL has, in fact, received inventions from 26 out of a total of over 100 such departments and agencies. In addition the Company has Agreements with 18 Canadian universities and colleges — one such Agreement being added last year — and with five provincial research organizations.

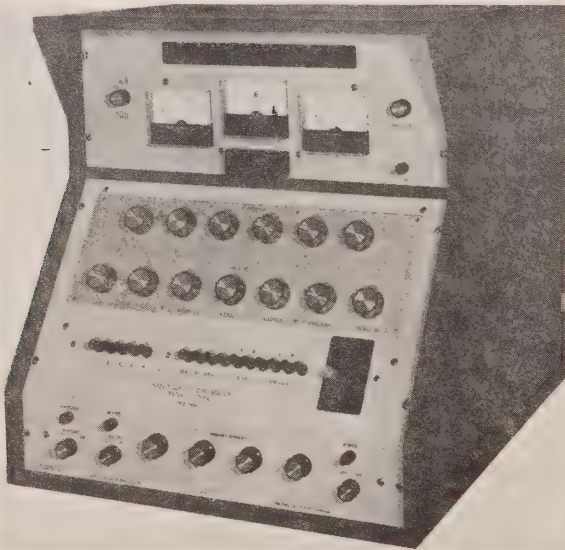
We are not at all sure that researchers in Canada are fully conscious of the importance both to their own benefit and to the benefit of the Canadian economy of disclosing any possibly patentable discoveries first into the patent system. During the year CPDL continued its program of informing researchers of the importance of disclosing possibly patentable material first into the patent system.

As at 31st March 1968 CPDL had received, from all sources, an accumulated total of 2,245 proposals for assessment of which 172 were received during 1967-68. This was 14 more than in the previous year. Each of these proposals required careful screening and appraisal prior to decision on whether to file an application for patent and, if so, in which country first. Subsequently decisions will be required on which additional countries, if any, to apply for patent on each invention; and, still later, on whether paying the annual renewal fees on each patent in each country is still worth while. Later still a question may arise on any patent of whether it is worth the litigation costs to assert or to defend it in any country.

During the year the staff of the Company remained constant in size. Considerable effort was directed towards modifying CPDL's financial management system towards program budgeting and responsibility accounting in line with the

guidance given by Treasury Board for government-wide adoption. CPDL plans to bring this system into use beginning with the programming for fiscal year 1969-70. Associated with this was staff training and work to introduce automatic data processing into those elements of CPDL's operations and administration which will definitely benefit thereby.

I mentioned above that CPDL last year received 172 proposals for our assessment. Of these 41 (49 in 1966-67) originated with the National Research Council, 30 (37) with Atomic Energy of Canada Limited (AECL), 13 from the Department of Energy, Mines and Resources, 37 from the Department of National Defence, 7 from the Department of Agriculture, 9 from among four other government departments and agencies, 29 (31) from universities and 6 (7) from provincial research organizations. Among the universities forwarding proposals for patent, the most received from any university was six. Another university forwarded five and two others four each. A further eight universities contributed ten proposals for patenting assessment.



POTENTIOMETER BASED ON DC CURRENT COMPARATOR
an entirely new and easily applied measuring concept makes
this potentiometer by far the most stable and accurate ever built

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS

Ottawa, June 17, 1968.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1968. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

A. M. Henderson,
Auditor General of Canada.

Statement of Income and Expense for the year ended March 31, 1968
(with comparative figures for the year ended March 31, 1967)

	<u>1968</u>	<u>1967</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$368,235	\$392,839
Less: costs of licensing rights and related technical assistance, etc.	<u>57,177</u>	<u>43,610</u>
	\$311,058	349,229
Interest earned	55,354	53,514
Income from agency agreements	17,638	18,844
Miscellaneous income	<u>2,392</u>	<u>-</u>
	386,442	421,587
<u>Expense</u>		
Salaries	188,448	140,293
Promotion and development, including \$10,000 prepaid promotion and development expense written off	123,586	143,142
Patent attorneys' fees and other patenting costs	84,207	78,170
Services provided by National Research Council	20,000	20,000
Awards to inventors	16,400	20,202
Travel	5,332	4,642
Miscellaneous	4,116	2,743
Office stationery, supplies, equipment and furnishings	3,072	3,441
Legal fees	-	4,297
Provision for doubtful account	<u>-</u>	<u>500</u>
	<u>445,161</u>	<u>417,430</u>
Net loss (profit)	<u>\$ 58,719</u>	<u>(\$ 4,157)</u>

Note: Salaries for 1968 include remuneration of directors as directors, officers or employees, \$5,025.

(Incorporated under the Companies Act)

Balance Sheet as at

(with comparative figures for 1967)

<u>Assets</u>		
	<u>1968</u>	<u>1967</u>
Cash	\$ 8,962	\$ 75,064
Accounts receivable	52,364	37,873
Less: Allowance for doubtful account	-	<u>500</u>
		37,373
Interest accrued on investments	17,178	15,507
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value, March 31, 1968, \$1,057,535; March 31, 1967, \$1,101,604)	1,143,298	1,108,447
Prepaid promotion and development expense	132,500	142,500
	<u>\$ 1,354,302</u>	<u>\$ 1,378,891</u>

Notes:

1. The Company had outstanding commitments amounting to \$170,941 as at March 31, 1968 in respect of its development program.
2. A contingent liability of approximately \$34,500 existed with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.

Approved on behalf of the Board

sgd. B. G. Ballard, Director

sgd. F. L. W. McKim, Director

DEVELOPMENT LIMITED

ada Corporations Act)

March 31, 1968

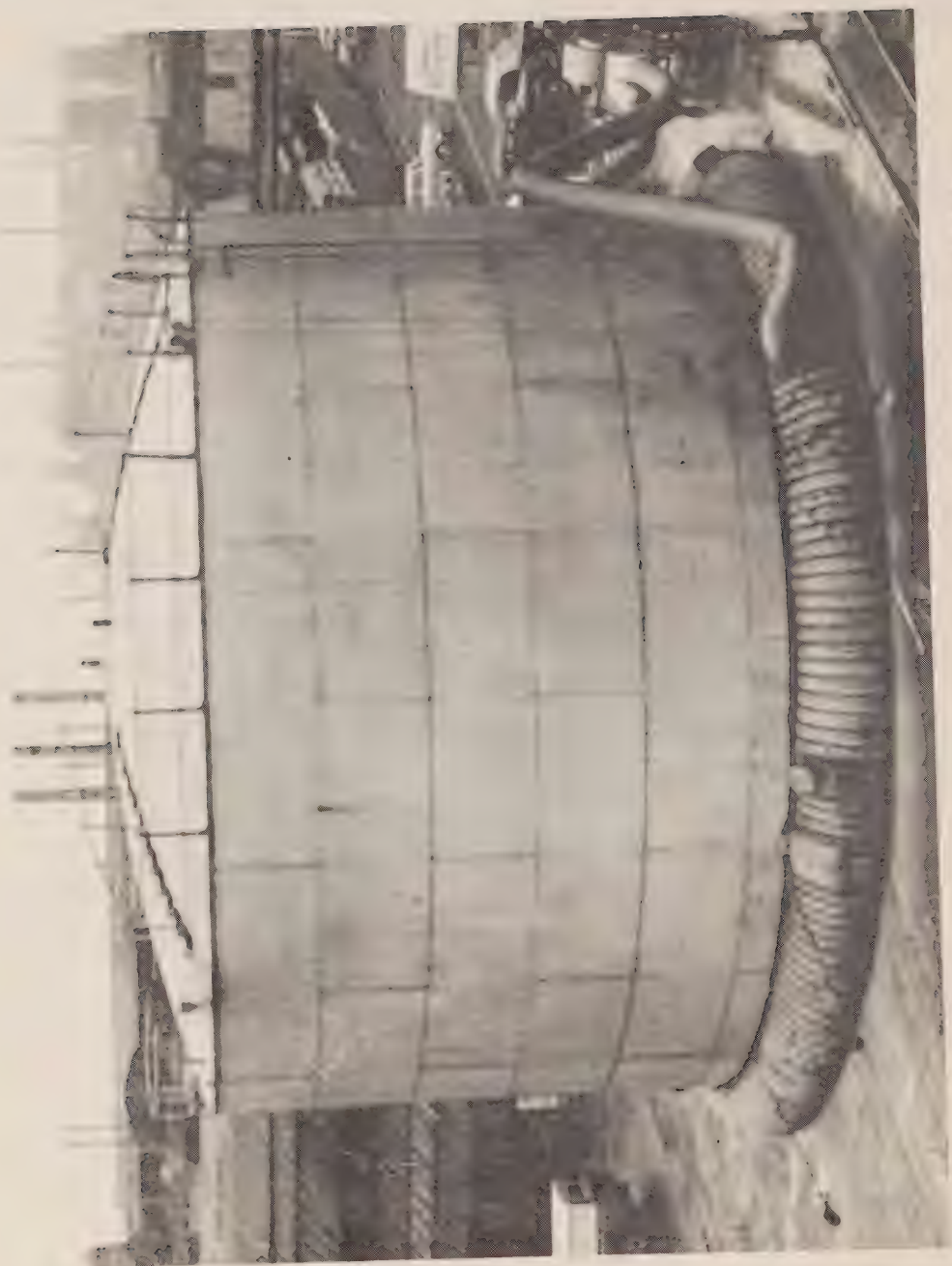
as at March 31, 1967)

Liabilities

	<u>1968</u>	<u>1967</u>
Accounts payable	\$ 133,164	\$ 86,281
Royalties paid in advance	1,650	1,350
Capital:		
Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance as at April 1, 1967	\$ 995,061	
Deduct:		
Adjustment of prior years' income resulting from overpayment of royalties by licensees \$13,053		
Net loss for the year, per Statement of Income and Expense	<u>58,719</u>	<u>71,772</u>
Balance as at March 31, 1968	<u>923,289</u>	<u>995,061</u>
	<u>1,219,488</u>	<u>1,291,260</u>
	<u>\$1,354,302</u>	<u>\$1,378,891</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 17, 1968, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd. A. M. Henderson
Auditor General of Canada



HOVERTANK - air cushion being used to move a large oil storage tank

Among the proposals for assessment 46 were various types of instruments (33 to do some kind of measuring or testing), 23 were concerned with nuclear physics, 21 were in the field of electricity (11 concerned basic electric elements and 5 basic electronic circuitry), 14 were in the field of human necessities, e.g. agriculture, foodstuffs, etc., and the remainder were distributed through such fields as chemistry, metallurgy, transportation and mechanics.

During the year CPDL filed first applications for patent on 70 different inventions, the same number as in 1966-67. Of these 28 were filed by CPDL's patent branch and the remainder of the work was let out among 13 Canadian patent agent firms. In addition CPDL made 185 further applications in additional countries and continued the prosecution on over 500 previously filed applications. During its existence CPDL has made applications for patent in 58 different countries.

As at 31st March 1968 our patent branch had directly or through patent agent firms over the years obtained patents on 660 different inventions and patent was pending on 350 more.

Using such data as the Canadian Patent Office was able to furnish from its records it appears that CPDL at present is filing about five percent of the total applications for patent which are made to the Canadian Patent Office by applicants having residence in Canada.

It should be explained that whereas CPDL handles the patenting of most AECL inventions AECL pays the costs and retains the title. At the time CPDL files application for patent our development and promotion staff makes an assessment on whether the invention is suitable for commercial exploitation. During the past fiscal year CPDL undertook commercial exploitation of two of the total of 30 AECL inventions which were offered. The remainder were directly related to nuclear reactor technology and are exploited by AECL.

It should also be explained that the Department of National Defence (DND) handles the patenting of all inventions arising in DND. The administration and control of those inventions which in DND's opinion are releasable for commercial

exploitation are turned over to CPDL which pays for the patenting and renewal costs in all countries beyond those where the patenting is needed for military purposes.

The life of a patent in most countries is approximately 17 years and the patents which were in CPDL's early holdings are now expiring at an increasing rate. In some other cases the older patents have been superseded by improvements and are no longer marketable.

Turning now to last year's activities in the development, promotion and licensing of inventions I should first observe that nearly all our inventions come from publicly-funded, research oriented sources which are neither organized nor have funds made available to carry a discovery — whether it be a device, process or substance — very far past the research stage along the development road towards readiness for general use. Thus, in marketing an invention, our Company commonly has to assess the nature and amount of development that will be required to put it into production. In many cases the licensee will be willing or can be persuaded to include the necessary development in the license agreement and, in these, CPDL provides opportunity for the licensee to recover his costs by making him the sole licensee for an appropriate period or by making allowances in the royalty rates. In order to accomplish its Object of making the benefits of inventions "more available to the public, through industry" our Company, on other occasions will pay the costs of certain portions of a development or it will enter into cost sharing arrangements with a licensee in the development of prototype(s) or of a pilot facility for purposes of testing or demonstrating the invention under conditions likely to be met in commercial use or production.

In last year's Report we mentioned our activities in developing our "Selective Agglomeration" process, an extremely versatile technique that allows rapid, efficient and selective removal of solids from liquid suspensions. During 1967-68 we continued our support of this process particularly on its beneficiation of difficult iron ores. There was also considerable work done on the removal of sulphur, ash and moisture from coal. This may result in important savings in the production of



VASCULAR SUTURING INSTRUMENT

coke and this is being investigated by the Department of Energy, Mines and Resources.

We also reported previously on our development of disposable plastic bushings for our suturing instrument — a device which enables a surgeon to make blood-tight joints quickly even in small blood vessels. This has now been successful — in fact, the work has advanced the state of the art in moulding very small and accurate plastic products — and it has opened the way for widespread use of this instrument. Some further development is required to work out economical loading and production techniques.

Also previously mentioned were our patents which enable the use of microwave energy to heat one substance selectively even when in intimate association with others. During 1967-68 a demonstration microwave dryer was constructed and

used extensively to test the application of this technique to the drying of paper, leather and other materials during manufacture. This dryer is being loaned to the Pulp and Paper Research Institute for extensive trials in the paper-making field and plans have been drawn for a further test facility.

Development support was initiated on an instrument for measuring the progress in smelting batches of ores. Hopes are high that it will prove to be a valuable asset and eventually enjoy use in many countries.

Another invention of interest which came into our inventory was a very accurate radar altimeter able to "see" the ground through forest cover and to measure the height of the tree cover as well. Our Company assisted in financing trials conducted in Guatemala in March 1968 to clarify whether this radar could "see" through the densities of tropical forest. The trials were encouraging and, with the help of the further development support our Company is planning to give we are hopeful this device will be of unusual value in enabling aerial surveys, for example of crop-raising potential, in areas of the world where need for such surveys is especially great.



RAIN REPELLENT GLAZE
for use on plastic windshields on aircraft and helicopters



DIVING COMPUTER

this instrument is carried by the diver and indicates the maximum rate at which he can ascend without danger of getting "the bends"

Development assistance has been continued in several smaller projects, in the main with encouraging results.

Our Company's development and promotion branch is free to begin the active promotion of an invention as soon as the authority for administration and control of the invention has been transferred to us and the first application for patent on it has been filed. During the past year 62 inventions thus became available for promotion. During the year 28 inventions were licensed to industry, several as a result of negotiations begun in the previous year or earlier. At 31st March 1968 CPDL had licenses in force on a total of 244 inventions.

Deletions due to licensing, expiry of patents and obsolescence resulted in removal of 14 cases from our active list leaving 692 cases available for licensing.

The Company exhibited in three trade shows in Canada and one in the United States with very good results. The number of visitors from both Canadian and foreign industry increased and visits to industry by Company staff also increased as more staff became available.



EDGE LINE GLUE DRYER

microwave energy is used to dry the glued edge
of multiple forms at high speed

With regard to infringement of patents and patent applications in the CPDL inventory, the negotiations with the company in the United Kingdom which in our 1966-67 Report was alleged to be infringing one of our British patents has reached a point where we expect to conclude a license agreement and settlement in the very near future. Also, a satisfactory solution to the Belgian infringement was found and we were not forced to consider litigation. We are now endeavouring to reach an understanding with a United States company which is alleged to be infringing one of our patents in Canada and one in the United States. We were successful in obtaining a patent in West Germany regarding one of our inventions and we are now in the process of negotiating a license with a West German company which is alleged to be infringing the patent. We have been fortunate in not having to resort to litigation as a solution to our infringement problems since litigation in patent matters tends to be expensive.

Turning now to our Company's Financial Statement and the Report of the Auditor General thereon you will note that income was down by \$35,145 and expenditure was up by \$27,731 compared with 1966-67. The drop in income is explained in most part by a general lessening in total sales by our licensees despite a net increase of twelve revenue-producing license agreements.

The greater expenditure was largely in salaries brought about in part by increase in staff strength all of which occurred in the latter part of 1966-67.

Although the expenditure on Development and Promotion would appear on casual examination to be down \$20,000 it is important to note that the 1966-67 figure contained \$70,000 write-off of Prepaid Promotion and Development Expense whereas the 1967-68 figure includes only \$10,000 on this account. Thus the actual amount spent on development and promotion in 1967-68 was \$113,586 and this was an increase of \$40,000 above the \$73,142 actually spent in 1966-67.

In retrospect we are pleased to believe that our Company in 1967-68 again made substantial progress in the furtherance of its Object and was once more able to do so without cost to the Canadian public.

In accordance with the Financial Administration Act the Company's operating budget for the 1968-69 fiscal year has been approved by you and the President of the Treasury Board.

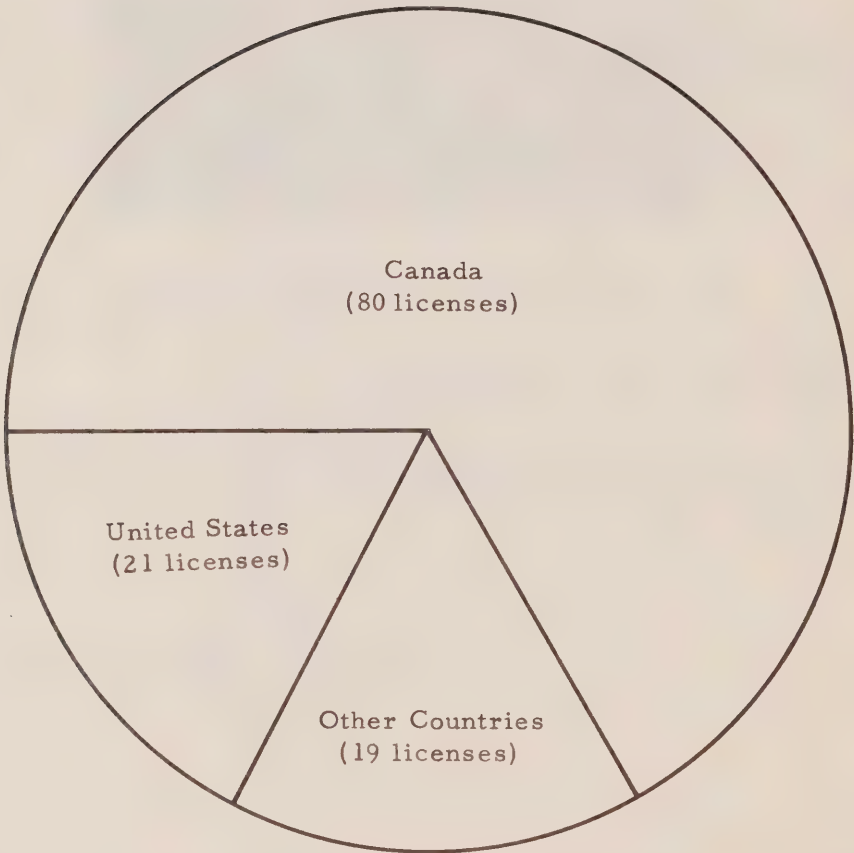
Yours faithfully,

A handwritten signature in dark ink, appearing to read "B. G. Ballard". The script is cursive and fluid, with the first letters of the first and last names being capitalized and prominent.

B. G. Ballard,
President.

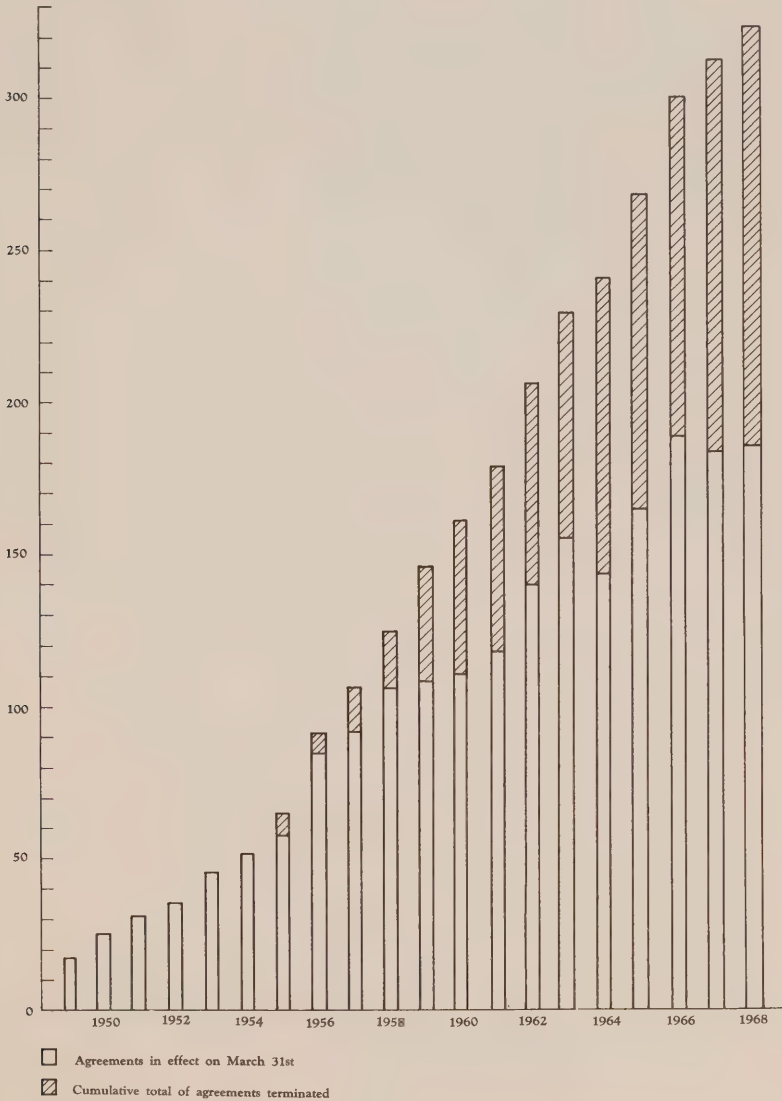
DISTRIBUTION OF LICENSES

Most of the 120 license agreements that produced revenue this year are with companies manufacturing in Canada.



LICENSE AGREEMENTS

The effective lifetime of some license agreements is much less than the 17 years for which patent rights exist; every year, therefore a few agreements are cancelled. In addition, the Company is now old enough for some early agreements to end because all the patent rights have expired.





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ANNUAL REPORT

1969

[Canada]

ANNUAL REPORT
1969

CANADIAN PATENTS AND DEVELOPMENT LIMITED

DIRECTORS

W. M. Auld,
President,
Bristol Aerospace Ltd,
Winnipeg.

B. G. Ballard,
Consultant,
Ottawa.

J. P. Drolet,
Assistant Deputy Minister,
(Mineral Development),
Department of Energy, Mines
and Resources.

P. R. Gendron,
President,
Pulp and Paper Institute of
Canada,
Pointe Claire, P.Q.

F. T. Rosser,
President,
Algonquin College,
Ottawa.

W. G. Schneider,
President,
National Research Council.

K. F. Tupper,
Vice-President (Administration),
National Research Council.

R. J. Uffen,
Chairman,
Defence Research Board.

F. C. Wallace,
President,
Smith and Stone Limited,
Toronto.

J. H. Warren,
Deputy Minister,
Department of Industry, Trade
and Commerce.

OFFICERS

President	B.G. Ballard
Vice-President	K.F. Tupper
General Manager	C.L. Annis
Secretary-Treasurer	F.R. Charles

BRANCHES

Development and Promotion	J.R. Johnson, Chief K.G. Lund J.E.H. Bowles R.A. Pacaud
Patents	J.R. Hughes, Chief A.A. Thomson F.W. Lemon R.G. Bitner
Comptroller	F.R. Charles, Comptroller H.A. Scharf
Legal	W.D. Gordon
Administration	L. Lipke

AUDITOR

The Auditor General of Canada

BANKERS

The Canadian Imperial Bank of
Commerce

HEAD OFFICE

275 Slater Street,
Ottawa 4, Ontario.



CANADIAN PATENTS AND DEVELOPMENT LIMITED

25 June 1969

The Honourable C. M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Sir,

In accordance with Section 85(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year ended March 31, 1969. The Company's Financial Statement and the Report of the Auditor General are included.

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the patentable products of publicly financed and publicly or institutionally-performed research.

CPDL was brought into being by the National Research Council of Canada (NRC) in 1947 to handle inventions which had accumulated largely from NRC research during the Second World War. To this end CPDL examined inventions for patentability, made filings for patents in the patent offices of various countries on those inventions which were deemed to qualify, developed alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential

licensees, promoted and licensed inventions to industry, collected royalties, thereon, and from these provided cash awards to the inventors, defrayed costs of CPDL's operations and used its funds to assist in further development of inventions.



DR. B.G. BALLARD

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In 1951 CPDL concluded its first agreement to handle the patenting, development, promotion and licensing of inventions for a provincial research organization.

In 1952 CPDL entered into an agreement with the National Research Development Corporation of the United Kingdom whereby in return for a percentage of any royalty income received each would handle the promotion of certain cases belonging to the other. Similar agreements exist between CPDL and similar government organizations in India and South Africa.

The enactment of the Public Servants Inventions Act in 1954 by the federal government which, inter alia, specified that Ministers were empowered to transfer the administration and control of inventions to our Company, opened the way to CPDL becoming the Canadian government's prime patenting and licensing agency.

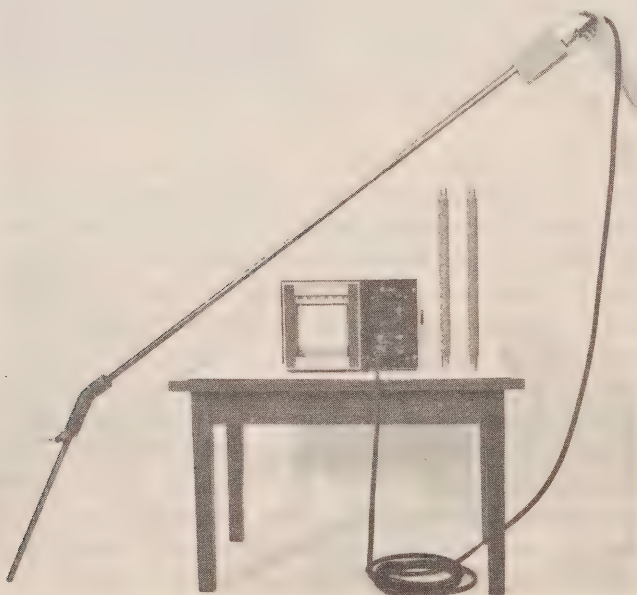
Today CPDL is eligible to accept and handle the administration and control of inventions arising in all Canadian government departments and agencies. Over the years CPDL has, in fact, received inventions from 28 out of a total of over 100 such departments and agencies. In addition the Company has Agreements with 18 Canadian universities and colleges and with seven provincial and other research organizations operating wholly or largely under public financing.

We are not at all sure that researchers in Canada are fully conscious of the importance both to their own benefit and to the benefit of the Canadian economy of disclosing any possibly patentable discoveries first into the patent system. During the year CPDL continued its program for motivating researchers to disclose their possibly patentable material first into the patent system and made provision for expanding this program in future years. As will be noted in the next paragraph CPDL has been receiving steadily increasing numbers of disclosures and we believe our program deserves some of the credit.

At at 31st March 1969 CPDL had received, from all sources, an accumulated total of 2,453 proposals for assessment of which 208 were received during 1968-69. This was 36 more than in 1967-68, an increase of almost 21% compared with an average yearly increase of 9% over the previous three years. Each of these proposals required careful screening and appraisal prior to decision on whether to file an application for patent and, if so, in which country first. Subsequently decisions will be required on which additional countries, if any, to apply for patent on each invention; and, still later, on whether paying the annual renewal fees on each patent in each country is still worth while. Later still a question may arise on any patent of whether it is worth the litigation costs to assert or defend it in any country.

During the year the Company added three members to its staff including a patent branch officer and an assistant for our Accountant. Continuing effort was applied to modifying CPDL's financial management system towards program budgeting and responsibility accounting and the budget for 1969-70 followed after prior approval of a Program of Activities. During 1969-70 it is planned to classify accounts receivable and revenues into the same coding structure as used for expenditure in the various Program Activities in order to facilitate further the in-depth analysis of various aspects of our operations.

Because the National Research Council was no longer able to make its office accommodation available for our use CPDL moved to new accommodation at 275 Slater Street in downtown Ottawa at the end of September 1968. The present net cost of this accommodation has had the effect of increasing our operating expenses by about \$50,000 per annum. On the other hand our new location is considerably more central to our various sources of inventions in the Ottawa area and it induces more visits to our offices by industrialists while in Ottawa.



Probe determining oxygen content of molten steel in seconds brings automation of steel production nearer

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS

Ottawa, June 10, 1969.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1969. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

A. M. Henderson,
Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED

11

Statement of Income and Expense for the year ending March 31, 1969
(with comparative figures for the year ended March 31, 1968)

	<u>1969</u>	<u>1968</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$ 378,303	\$ 368,235
Less: Costs of licensing rights and related technical assistance, etc.	<u>82,334</u>	<u>57,177</u>
	\$ 295,969	311,058
Interest earned	57,652	55,354
Income from agency agreements	22,576	17,638
Miscellaneous income	<u>2,856</u>	<u>2,392</u>
	379,053	386,442
<u>Expense</u>		
Salaries (Note 1)	221,919	188,448
Promotion and development	190,777	123,586
Patent attorneys' fees and other patenting costs	75,805	84,207
Rent (Note 2)	24,466	-
Awards to inventors	15,788	16,400
Office stationery, supplies, equipment and furnishings	14,558	3,072
Services provided by National Research Council	10,000	20,000
Travel	6,408	5,332
Miscellaneous	<u>6,216</u>	<u>4,116</u>
	<u>565,937</u>	<u>445,161</u>
Net loss	<u>\$ 186,884</u>	<u>\$ 58,719</u>

Note 1: Salaries for 1969 include remuneration of directors as directors, officers or employees, \$8,500.

Note 2: Prior to October 1968, the Company had rent free accommodation.

CANADIAN PATENTS AND
(Incorporated under the
Balance Sheet and
(with comparative figures)

	<u>Assets</u>	
	<u>1969</u>	<u>1968</u>
Cash	\$ 79,995	\$ 8,962
Accounts receivable	87,890	52,364
Interest accrued on investments	16,872	17,178
Investments in bonds of, or guaranteed by, the Government of Canada, at cost (market value, March 31, 1969, \$977,953; March 31, 1968, \$1,057,535)	1,066,495	1,143,298
Prepaid promotion and development expense	122,500	132,500
Experimental equipment on loan to licensees, under shared development program, at nominal value	1	-
	<u>\$1,373,753</u>	<u>\$1,354,302</u>

- Notes: 1. The Company had outstanding commitments amounting to \$107,367 as at March 31, 1969 in respect of its development program.
2. A contingent liability of approximately \$34,500 existed with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.

Approved on behalf of the Board

sgd B.G. Ballard, Director

sgd K.F. Tupper, Director

DEVELOPMENT LIMITED

(Canada Corporations Act)

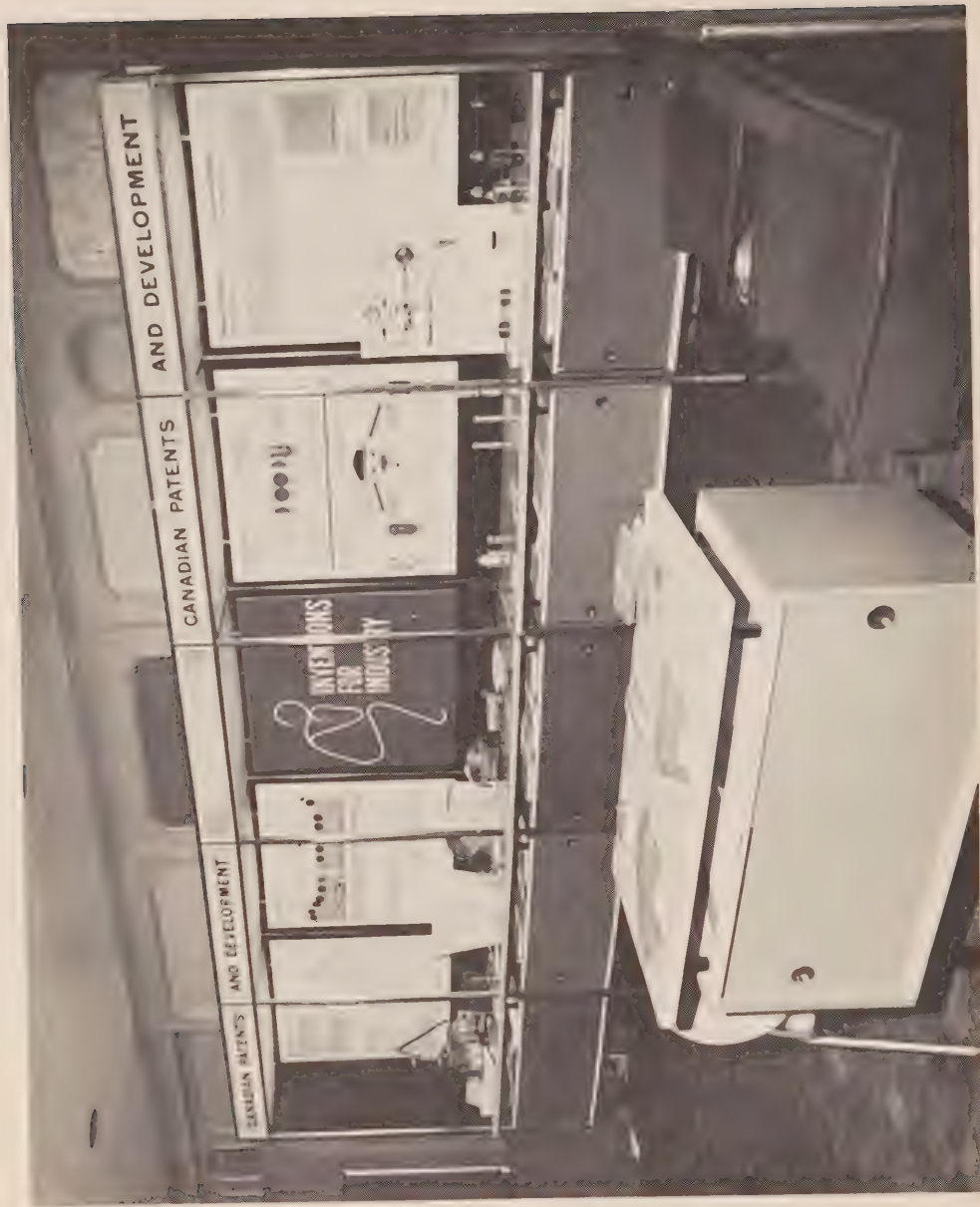
at March 31, 1969

as at March 31, 1968)

	<u>Liabilities</u>	
	<u>1969</u>	<u>1968</u>
Accounts payable	\$ 318,090	\$ 133,164
Royalties paid in advance	1,726	1,650
Equity of Canada:		
Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance at beginning of year	\$ 923,289	
Add: Net adjustment of prior		
years' royalties	<u>21,333</u>	
	944,622	
Deduct: Net loss for the year,		
per Statement of		
Income and Expense	<u>186,884</u>	
	<u>757,738</u>	<u>923,289</u>
	<u>1,053,937</u>	<u>1,219,488</u>
	<u>1,373,753</u>	<u>1,354,302</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 10, 1969, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd. A.M. Henderson
Auditor General of Canada



CPDL Exhibit at Canadian Institute of Food Technology National Conference - June 1969

I mentioned above that CPDL last year received 208 disclosures of inventions for our assessment. Of these 38 (41 in 1967-68) originated with the National Research Council of Canada; 27 (37 in 1967-68) with the Department of National Defence (DND); 24 (30) from Atomic Energy of Canada Limited (AECL); 15 (13) from the Department of Energy, Mines and Resources (EMR); 10 from the various combinations of the Department of Fisheries, Forestry and Rural Development; 3 (7) from the Department of Agriculture (DofA); one each from four other federal departments; 67 (29 in 1967-68) from universities; 11 from federal proprietary corporations and 5 from provincial research institutes. Among the features in this general area has been the slow decline over the last three years of the number of disclosures from most of the federal government departments and agencies on the one hand and the sharp increase in the number from universities in the past year. Among the universities forwarding proposals for assessment in 1968-69 one university forwarded 13 and another 12 and another eight. Five universities forwarded three or more and another seven forwarded one or two each. Altogether, disclosures were received from 15 universities and colleges.

Among the proposals for our assessment 40% were various types of instruments (of which one-half had to do with some kind of measuring or testing) 20% were performing operations, e.g. separating, mixing, shaping, machine tools, working of various materials, transporting, materials handling etc.), 10% were devoted to each of electricity/electronics; chemistry/metallurgy; and mechanics. The remaining 10% were distributed among human necessities, e.g. drugs, food-stuffs, agriculture, etc.; textiles, papers; and construction. These ratios have remained fairly constant over the past several years.

During the year CPDL filed first applications for patent on 64 different inventions. This compares with 70 in 1967-68 and an average of 65 per year over the previous four years. Of the 64 first filings made last year 23 were filed by CPDL's Patent Branch and the remainder were let out amongst various Canadian patent agent firms. In addition CPDL made 139 further applications in additional countries - compared with 185 the previous year - and continued the prosecution on over 300 previously filed applications. Over the years CPDL has made applications for patents in 59 different countries.

As at 31 March 1969 our Patent Branch had directly or through patent agent firms accumulated issue of patent on 711 different inventions and patent was pending on 378 more.

It should be explained that whereas CPDL handles the patenting of most AECL inventions AECL pays the costs and retains the title. At the time CPDL files application for patent our development and promotion staff makes an assessment on whether the invention is suitable for commercial exploitation. During the past fiscal year CPDL undertook commercial exploitation of four of the total of the 24 which offered. The remainder were directly related to nuclear reactor technology and are exploited by AECL.

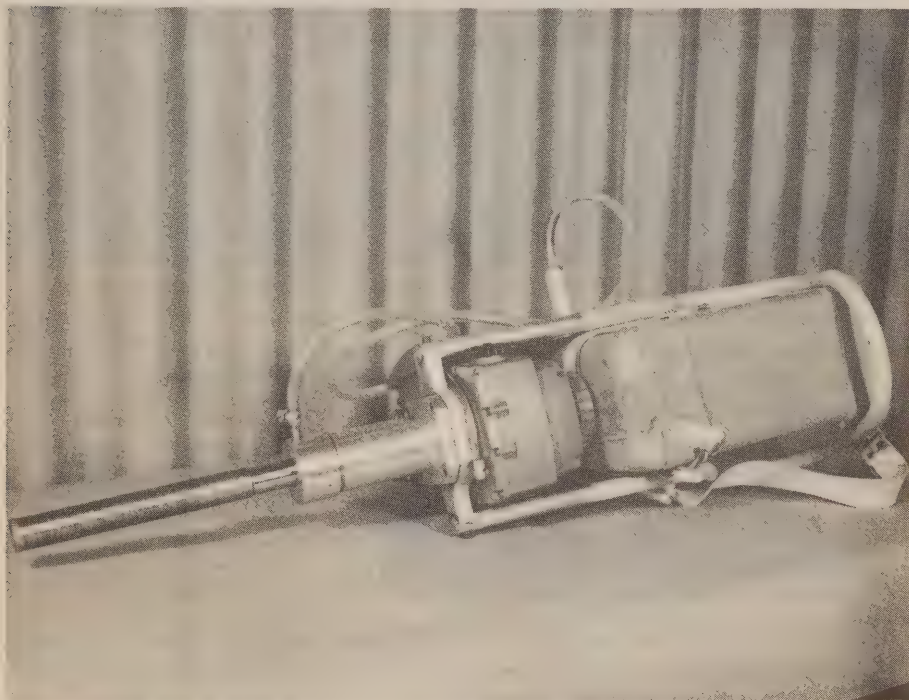
It should also be explained that the Department of National Defence (DND) handles the patenting of all inventions arising in DND. The promotion, development and licensing of those inventions which in DND's opinion are releasable for commercial exploitation are turned over to CPDL which pays for the patenting and renewal costs in all countries beyond those where the patenting is needed for military purposes.

The life of a patent in most countries is approximately 17 years and the patents which were in CPDL's early holdings are now expiring at an increasing rate. In some other cases the older patents have been superseded by improvements and are no longer marketable.

Turning now to last year's activities in the development, promotion and licensing of inventions I should first observe that nearly all our inventions come from publicly-funded, research-oriented sources which are neither organized nor have funds made available to carry a discovery - whether it be a device, process or substance - very far past the research stage along the development road towards readiness for general use. Thus, in marketing an invention, our Company commonly has to assess the nature and amount of development that will be required to put it into production. In many cases the licensee will be willing or can be persuaded to include the necessary development in the license agreement and, in these, CPDL provides opportunity for the licensee to recover his costs by making him the sole licensee for an appropriate period or by making allowances in the royalty rates. In order to accomplish its Object of making the benefits of inventions "more available

to the public, through industry" our Company, on other occasions will pay the costs of certain portions of a development or it will enter into cost sharing arrangements with a licensee in the development of prototype(s) or of a pilot facility for purposes of testing or demonstrating the invention under conditions likely to be met in commercial use or production.

During 1968-69 CPDL expended a total of \$170,418 on the development of its inventions. This was an increase of about \$75,000 above 1967-68 and \$107,000 more than in 1966-67. Approximately \$135,000 of last year's total was in the form of cost sharing of developments with companies on the inventions they had licensed. The remainder was for improving inventions to make them more attractive for licensing. Included in the latter were two inventions in which CPDL has maintained its confidence in their potential and has provided development support for many years.



FIFTEEN-POUND ROCK-SAMPLING PORTABLE DRILL with its own water pump is a boon to prospectors and geologists

The "Selective Agglomeration" process is a very versatile technique which allows selective, efficient and rapid removal of solids from liquid suspensions and on which CPDL has expended almost \$140,000 (including \$15,750 last year) on promoting and testing it on various applications. During 1968-69 CPDL experienced a surge of interest from a number of potential licensees for various uses and we have strong reason to anticipate entering into contracts with some or all of them next year. Similarly, CPDL has spent almost \$200,000 (including \$71,500 last year) supporting the Vascular Suturing Instrument. It enables a surgeon to make blood-tight joints quickly in a range of sizes from arteries down even to small blood vessels. Heartening development and pre-production progress was made during the year and we are confident the Instrument will begin to be available for general use by surgeons during 1969-70.

Similarly, last year also saw readiness attained for marketing the Radar Altimeter and the Direct Oxygen Probe for Liquid Metals. Both of these devices should prove to be of substantial economic benefit to the public. Likewise, aided by our financial assistance, our licensee for the Microwave Drying Process has been successful in widening the range of equipment he has to offer and in extending his sales. CPDL has also provided assistance to a few quite small projects.

A feature of 1968-69 was that CPDL received only two new requests from licensees for financial assistance in development. Similarly, only one of the newly-arrived inventions seemed to justify further development at CPDL initiative and expense to make it more attractive for licensing. Thus of all the development projects which CPDL supported in 1968-69 only two comprised inventions which were not continuations from previous years. In that the number of new inventions which CPDL licensed in 1968-69 was about the same as in recent years it is not clear why so few requests for assistance were received from licensees.

Our Company's development and promotion branch is free to begin actively promoting an invention for licensing as soon as the authority for its administration and control has been transferred to us and the first application for patent on it has been filed. During the past year 68 new inventions thus

became available for promotion - an increase of six above the previous year which, in turn, was three more than in 1966-67. During the year 26 inventions were newly licensed to industry. Over the past three years CPDL has been able to license its inventions at over 40% of the rate at which new inventions have been entering inventory. As at 31st March 1968 CPDL had licenses in force on a total of 254 inventions, being a net increase of 10 above the previous year-end.

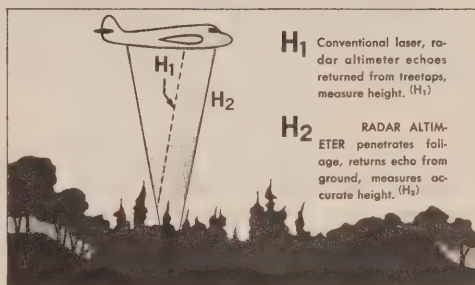
accurate ground/aircraft measurement — THROUGH TREES



Features

- Accurately measures ground to aircraft height through trees and foliage cover thus providing a definite advantage over conventional radar and laser altimeters.
- Solid state circuitry for optimum reliability and minimum maintenance.
- Designed for ease of installation on helicopters and light aircraft.

Extensively tested over northern forest and tropical jungle.



NATIONAL FILM BOARD PHOTO

Deletions due to licensing, expiry of patents and obsolescence resulted in the removal of 31 cases from our active list leaving 729 cases available for licensing. This is 37 more than a year earlier.

Our Company exhibited at two trade shows last year, namely the Materials Handling, Transportation and Mining Show in Toronto in the spring, and at the Canadian Chemical and Equipment Exhibition in Montreal last autumn - both producing very satisfactory responses. At the Exhibition in Montreal we had bilingual texts on our displays and our "Inventions for Industry" handouts were in both languages.

The situation regarding infringement of patents and patent applications in the CPDL inventory is encouraging. We have now reached a settlement with a company in the U.K. in respect of the situation mentioned in our 1966-67 and 1967-68 Reports. The rather protracted negotiations with the U.S. company which we cited in our 1967-68 Report, appear to be reaching a climax and we expect that we will reach a satisfactory settlement without the necessity of commencing legal proceedings. Also, during the past year we have been negotiating with a Canadian company regarding the infringement of a Canadian patent for which we already have two licensees and the market for the invention may not be sufficiently large to warrant a third licensee. In such circumstances it is difficult to negotiate a settlement on mutually acceptable terms, hence we expect that, in order to avoid litigation, of necessity we will have to reach a compromise with the existing licensees so that we may be able to offer terms more acceptable to the company.

Turning now to our Company's Financial Statement and the Report of the Auditor General thereon you will note that income was down by \$7,389 and expenditure was up by \$120,776 compared with 1967-68. The drop in income, though much less than in the previous year, is explained in most part by a general lessening in total sales by our licensees despite a net increase of three revenue producing license agreements during the year and total increase of fifteen over the past two years. Indications point strongly to an increase in revenue next year.

Of the \$120,776 increase in last year's expenditure approximately \$70,000 was applied to the development of inventions which, it is expected, will produce increased revenues in future years; and nearly all remainder was for rental of office accommodation in downtown Ottawa and for moving expenses and increased staff directly associated with the move and operating at this new location.

In retrospect we are pleased to believe that our Company in 1968-69 again made substantial progress in assisting in bringing the patentable products of publicly-financed research into use for the public benefit and that we were able to do so without additional cost to the taxpayer.

In accordance with the Financial Administration Act our Company's operating budget for the 1969-70 fiscal year has been approved by you in your capacity as President of the Treasury Board.

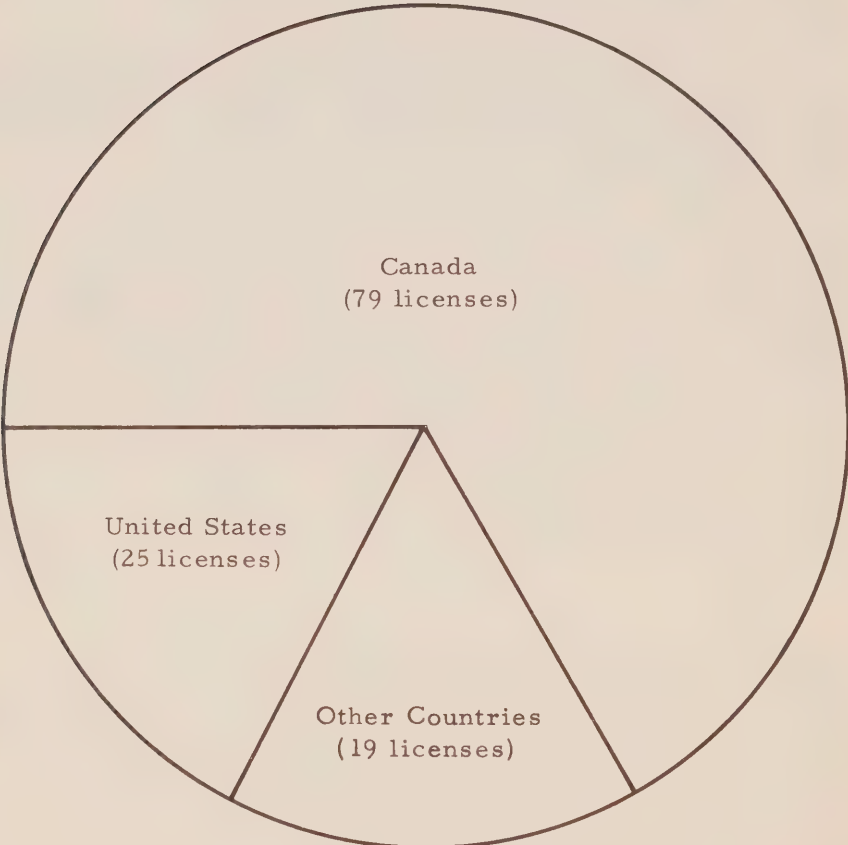
Yours faithfully,

A handwritten signature in dark ink, appearing to read "B. G. Ballard". The signature is written in a cursive, slightly stylized font.

B.G. Ballard,
President.

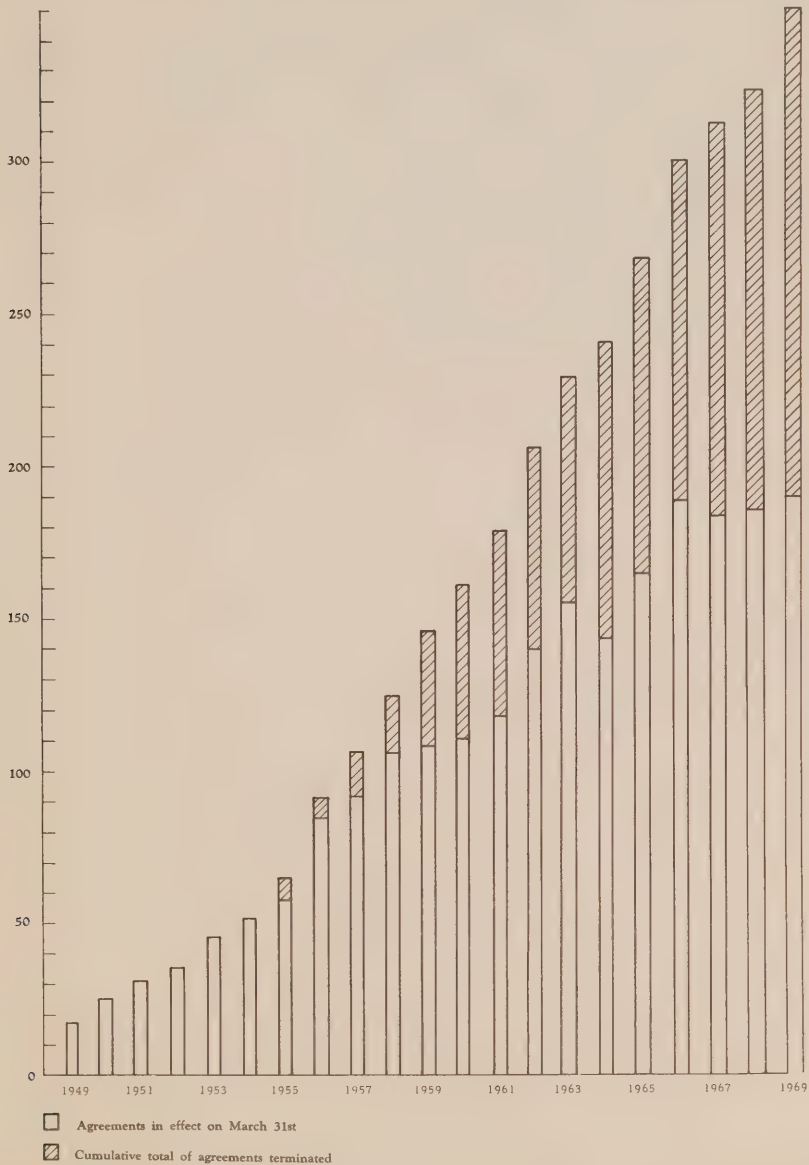
DISTRIBUTION OF LICENSES

Most of the 123 license agreements that produced revenue this year are with companies manufacturing in Canada.



LICENSE AGREEMENTS

The effective lifetime of some license agreements is much less than the 17 years for which patent rights exist; every year, therefore a few agreements are cancelled. In addition, the Company is now old enough for some early agreements to end because all the patent rights have expired.





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Government
Publications



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ANNUAL REPORT
1970

ANNUAL REPORT

1970

CANADIAN PATENTS AND DEVELOPMENT LIMITED

(C P D L)

DIRECTORS

W.M. Auld,
President,
Bristol Aerospace (1968) Ltd.
Winnipeg.

B.G. Ballard,
Consultant,
Ottawa.

J.P. Drolet,
Assistant Deputy Minister,
(Mineral Development),
Department of Energy, Mines
and Resources.

P.R. Gendron,
President,
Pulp and Paper Research Institute
of Canada,
Pointe Claire, P.Q.

F.T. Rosser,
Consultant,
Ottawa.

W.G. Schneider,
President,
National Research Council.

K.F. Tupper,
Vice-President, (Administration)
National Research Council.

R.J. Uffen,
Chief Science Advisor to the
Cabinet,
Ottawa.

F.C. Wallace,
Vice Chairman,
Fiberglas (Canada) Ltd.,
Toronto.

J.H. Warren,
Deputy Minister,
Department of Industry, Trade
and Commerce.

OFFICERS

President	B. G. Ballard
Vice-President	K. F. Tupper
General Manager	C. L. Annis
Secretary-Treasurer	F. R. Charles

BRANCHES

Development and Promotion	J. R. Johnson, Chief K. G. Lund J. E. H. Bowles R. A. Pacaud P. A. Miller
Patents	J. R. Hughes, Chief A. A. Thomson F. W. Lemon R. G. Bitner
Comptroller	F. R. Charles, Comptroller H. A. Scharf
Legal	W. D. Gordon
Administration	L. Lipke
AUDITOR	The Auditor General of Canada
BANKERS	The Canadian Imperial Bank of Commerce
HEAD OFFICE	275 Slater Street, Ottawa 4, Ontario.



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

25 June 1970

The Honourable C. M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

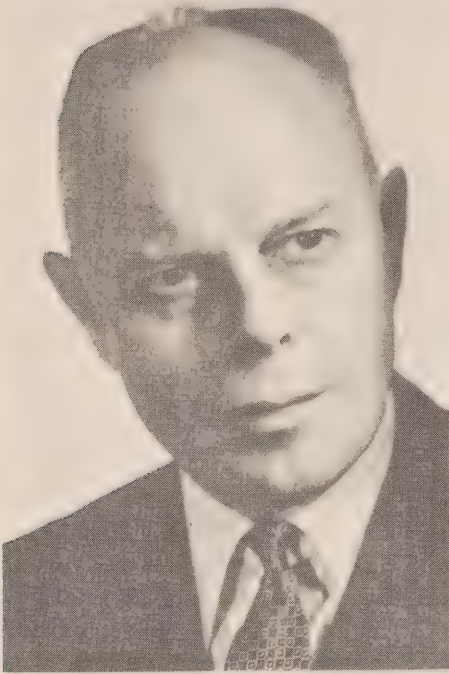
Dear Sir,

In accordance with Section 85(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year ended March 31, 1970. The Company's Financial Statement and the Report of the Auditor General are included.

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the licensable products of publicly financed and publicly or institutionally-performed research.

CPDL was brought into being by the National Research Council of Canada (NRC) in 1947 to handle inventions which had accumulated largely from NRC research during the Second World War. To this end CPDL examined inventions for patentability, made filings for patents in the patent offices of various countries on those inventions which were deemed to qualify, developed alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential

licensees, promoted and licensed inventions to industry, collected royalties thereon and from these provided cash awards to the inventors, defrayed costs of CPDL's operations and used its funds to assist in further development of inventions.



DR. B.G. BALLARD

In 1948 it was proclaimed that the Government Companies Operation Act was applicable to CPDL and in the same year the Company accepted the handling of inventions arising from government departments other than NRC. The first such department was the Department of Reconstruction and Supply. In the same year CPDL made provision for entering into agreements with universities, at the request of the university in each case, to handle their patentable or possibly-patentable material.

In 1951 CPDL concluded its first agreement to handle the patenting, development, promotion and licensing of inventions for a provincial research organization.

In 1952 CPDL entered into an agreement with the National Research Development Corporation of the United Kingdom whereby in return for a percentage of any royalty income received each would handle the promotion of certain cases belonging to the other. Similar agreements exist between CPDL and similar government organizations in India and South Africa.

The enactment of the Public Servants Inventions Act in 1954 by the federal government which, inter alia, specified that Ministers were empowered to transfer the administration and control of inventions to our Company, opened the way to CPDL becoming the Canadian government's prime patenting and licensing agency.

Today CPDL is eligible to accept and handle the administration and control of inventions arising in all Canadian government departments and agencies. Over the years CPDL has, in fact, received inventions from 28 out of a total of over 100 such departments and agencies. In addition the Company has Agreements with 20 Canadian universities and colleges and with 13 provincial and other research organizations operating wholly or largely under public financing.

We are not at all sure that researchers in Canada are fully conscious of the importance both to their own benefit and to the benefit of the Canadian economy of disclosing any possibly patentable discoveries first into the patent system. During the year CPDL extended its program for encouraging researchers in this direction by presenting silver lapel pins bearing replicas of our Corporation's official symbol "The Inventor" and formal certificates granting the right to wear our symbol to inventors on whose inventions we had been able to obtain issue of patent and which we had promoted for licensing. We have had many delighted replies from the recipients. We believe this program will serve not only to provide inventors with some further measure of well-deserved recognition but also give added incentive to disclose their inventions.

As at 31st March 1970 CPDL had received, from all sources, an accumulated total of 2659 proposals for assessment of which 206 were received during 1969-70. This was 2 less than in 1968-69. However 1968-69 had shown a jump of 21% compared with the 9% average over the previous 3 years. Our 1969-70 receipts merely restored the 9% longer-term average. Each of these proposals required careful screening and appraisal prior to decision on whether to file an application for patent and, if so, in which country first. Subsequently decisions will be required on which additional countries, if any, to apply for patent on each invention; and, still later, on whether paying the annual renewal fees on each patent in each country is still worth

Be it known that
Canadian Patents and Development Limited

has awarded to

Ira E Puddington


the right to wear

the Corporation's officially registered symbol

The Inventor

*in recognition of
having made an invention on
which patent has issued and
which the Corporation has promoted
for licensing.*

Ottawa September 17, 1968


General Manager


President

Dr. Puddington as inventor or co-inventor in 24 applications for patent (so far 17 have been granted) tops CPDL's list. Dr. Puddington is Director of NRC'S Chemistry Division.

while. Later still a question may arise on any patent of whether it is worth the litigation costs to assert or defend it in any country.

Suggestions had come from a number of directions that our Corporation should explore the question and the practicabilities of establishing and operating an arrangement which would provide the centralized biological testing of new compounds arising in Canada from publicly-financed research and of patenting and offering first to Canadian industry the opportunities to license those which showed an attractive potential. During the year we, in collaboration with the Medical Research Council, accomplished a considerable exploration of this question.

I mentioned above that CPDL last year received 206 disclosures of inventions for our assessment. Of these, 42 (38 in 1968-69) originated with the National Research Council of Canada; 27 (same as in 1968-69) with the Department of National Defence (DND); 16 (24) from Atomic Energy of Canada Limited (AECL); 16 (15) from the Department of Energy, Mines and Resources (EMR); 14 from the Department of Fisheries and Forestry (DF&F); 8 from the Department of National Health and Welfare (NHW); 4 (3) from the Department of Agriculture (CDA); and 10 from among five other federal departments for an overall total of 137 from the federal government sector; 59 (69 in 1968-69) from universities; nil (11 in 1968-69) from federal proprietary corporations; 4 (5) from provincial research institutes and 6 from other sources. Among the features in this general area has been the relatively constant output over the last four years of the number of disclosures from most of the federal government departments and agencies on the one hand and the sustained increase over the last two years in the number from universities. Among the universities forwarding proposals for assessment in 1969-70 one university forwarded 11 and another 7 and another 6. Five universities forwarded four or more and another nine forwarded up to three each. Altogether, disclosures were received from 17 universities and colleges compared with 15 the previous year and 12 in 1967-68.

Among the proposals for our assessment 40% were various types of instruments (of which one-half had to do with some kind of measuring or testing) 20% were performing operations, e. g. separating, mixing, shaping, machine tools, working

of various materials, transporting, materials handling etc.), 10% were devoted to each of electricity-electronics; chemistry/metallurgy; and mechanics. The remaining 10% were distributed among human necessities, e.g. drugs, foodstuffs, agriculture, etc; textiles, papers; and construction. These ratios have remained quite constant over the past several years. The inventions which gained outstanding publicity and interest from industry during last year came from the Defence Research Board's Establishment at Valcartier. They are concerned with a dramatic jump forward in gas lasers.

During the year CPDL filed first applications for patent on 74 different inventions. This compares with 64 in 1968-69 and an average of 65 per year over the previous four years. Of the 74 first filings made last year 34 were filed by CPDL's Patent Branch and the remainder were let out amongst various Canadian patent agent firms. In addition CPDL made 176 further applications in additional countries - compared with 139 the previous year - and continued the prosecution on about 400 previously filed applications. Over the years CPDL has made applications for patents in 59 different countries.

As at 31 March 1970 our Patent Branch had directly or through patent agent firms accumulated issue of patent on 774 different inventions and patent was pending on 389 more.

It should be explained that whereas CPDL handles the patenting of most AECL inventions, AECL pays the costs and retains the title. At the time CPDL files application for patent our development and promotion staff makes an assessment on whether the invention is suitable for commercial exploitation. During the past fiscal year CPDL undertook commercial exploitation of two of the 14 which were offered. The remainder were directly related to nuclear reactor technology and are exploited by AECL.

It should also be explained that the Department of National Defence (DND) handles the patenting of all inventions arising in DND. The promotion, development and licensing of those inventions which in DND's opinion are releasable for commercial exploitation are turned over to CPDL which pays for the patenting and renewal costs in all countries beyond those where the patenting is needed for military purposes.

The life of a patent in most countries is approximately 17 years and the patents which were in CPDL's early holdings are now expiring at an increasing rate. In some other cases the older patents have been superseded by improvements and are no longer marketable.

Turning now to last year's activities in the development, promotion and licensing of inventions I should first observe that nearly all our inventions come from publicly-funded, research-oriented sources which are neither organized nor have funds made available to carry a discovery - whether it be a device, process or substance - very far past the research stage along the development road towards readiness for general use. Thus, in marketing an invention, our Company commonly has to assess the nature and amount of development that will be required to put it into production. In many cases the licensee will be willing or can be persuaded to include the necessary development in the license agreement and, in these, CPDL provides opportunity for the licensee to recover his costs by making him the sole licensee for an appropriate period or by making allowances in the royalty rates; or by a mix of these or similar arrangements. In order to accomplish its Object of making the benefits of inventions "more available to the public, through industry" our Company, on other occasions, will pay the costs of certain portions of a development or it will enter into cost-sharing arrangements with a licensee in the development of prototype(s) or of a "pilot" facility for purposes of producing samples or of testing or demonstrating the invention under conditions likely to be met in commercial use or production.

During 1969-70 CPDL expended a total of \$71,782 on the development of its inventions. This was a decrease of about \$100,000 below 1968-69 but about \$8,000 more than in 1967-68. Approximately \$40,000 of last year's total was in the form of cost sharing of developments with companies on the inventions they had licensed. The remaining \$31,500 was for improving inventions to make them more attractive for licensing.

Development of the Vascular Suturing Instrument which has been reported on in each of the past four years has each year continued to produce difficult new technical problems. Much of last year was consumed in solving the problem of plating the plastic anvil bushings with a metal cladding sufficiently hard

and uniform unfailingly to turn and clinch the sharpened points of tantalum staples. At the year end, overall success in the complete instrument seemed to have been reached and start of routine production was being organized for early summer. If this instrument enjoys the widespread use which our licensee expects our Corporation's continuing support will have contributed decisively towards greatly simplifying and speeding up one of the most laborious and expensive elements of surgery as well as widening the scope of surgery in general.

The other projects to which we have provided financial assistance to licensees during the year have also shown heartening results:

Microwave Drying -- our two licensees are continuing to find new applications and are receiving an increasing number of orders.

Direct Oxygen Probe -- this device for quickly measuring the oxygen content of molten metals is now in the early stages of production and is giving evidence of world-wide interest and large future sales.

DC Current Comparator Bridge and Potentiometer Based on DC Current Comparator -- these ultra-precise electrical measurement instruments have gained world-wide attention.

Very Low Noise Amplifier -- during the year our licensee completed a small production run of this instrument for use in laboratory and hospital biological investigations and diagnoses. It appears to be a valuable addition to this field and our licensee is optimistic of its favourable reception.

Attractant for the Honey Bee -- Low Temperature Preparation of Carbon Molecular Sieves -- these are two inventions on which we have paid for additional development and the production of samples of the material.

In February 1970 the Department of Industry, Trade and Commerce announced revisions in its Program for Advancement of Industrial Technology (PAIT) which we believe will make it more attractive for use by our licensees.

Our Corporation's development and promotion branch is free to begin actively promoting an invention for licensing as soon as the first application for patent has been filed on it. During the past year 69 new inventions thus became available for licensing - an increase of one over the previous year which, in turn, was six more than in 1967-68. During the year 27 inventions were newly licensed to industry. Over the past four years CPDL has been successful in licensing its inventions at over 40% of the rate at which new inventions have been entering inventory. As at 31st March 1970 CPDL had licenses in force on a total of 258 inventions (among 155 different companies of which 147 are royalty-bearing) being a net increase of four above the previous year-end.

Deletions due to licensing, expiry of patents and obsolescence resulted in the removal of 48 cases (compared with 31 in 1968-69) from our active list leaving a total of 776 available for licensing.

Our Corporation exhibited at three trade shows last year; namely the Production Show in Toronto in June, the Food Technology Show in Ottawa, also in June, and the Electronics Conference in Toronto in October. The Food Technology Show was the first of its kind in Canada and although it was relatively small in size it provided our first opportunity to meet people in the food industry generally and to exhibit our inventions germane to their interests. The Production Show and the Electronics Conference were well attended and our exhibits drew a very satisfying amount of notice and serious enquiries.

We have been continuing our negotiations with two companies which are producing products which infringe several of our patents. In one case the company paid a lump sum for its past production, took a license on one invention for future production, and gave an undertaking to either cease production on the other invention or take a license if it decided to continue production. In the other case, the parent U.S. company commenced negotiations to purchase its requirements of the in-

vention from one of our licensees. Although the Canadian subsidiary company has not committed itself to cessation of the infringement, we expect that if a suitable arrangement can be entered into by the U.S. parent company with our licensee the Canadian company will be disposed to seek a similar arrangement.

Turning now to our Corporation's Financial Statement and the Report of the Auditor General, it may be noted in the Statement of Income and Expense that whereas both our gross and net incomes from royalties and licensing fees increased over the previous year our costs of licensing rights showed a proportionately far larger increase. This is mostly because in recent years an invention from a university has become much our largest single royalties earner and the earnings have reached a level at which we turn 85% of them over to the university.

Last year saw a beginning in our recoveries of the well-above-average expenditures we have made in the previous three years towards developing our inventions. We expect income from this sector will increase substantially next year and beyond.

Looking next at Expenses, salaries continue to be the largest single component. The \$28,000 rise was mostly in salary revisions towards compensating for cost-of-living increases although we also added an officer to our promotion and development branch.

In connection with the 25% increase in patent attorneys' fees and other patenting costs I mentioned earlier the substantially larger number of filings for patents. Also we experienced some cases in which the prosecutions for patent were unexpectedly difficult and expensive. Further, we were subjected to paying newly-raised scales of Patent Office fees and other charges.

Last year was the first since moving our offices downtown from the National Research Council at Ottawa's eastern outskirts in which we had to pay a full year's rent as well as bearing additional costs of services and supplies we must obtain through more expensive arrangements.

Although our Corporation's net operating loss of \$114,744 was \$72,000 less than in 1968-69, the increases in expenses which again were the prime reasons for this situation were comprised of accommodation and cost-of-living factors beyond our powers to avoid and of larger than normal financial outlays on the development of inventions. However, as already mentioned, the returns on these investments in development are now beginning to materialize; and these will increase.

In commenting on our general financial position and future prospects I should mention that during the period 1961 to 1965 our Corporation's revenues were inordinately dependent on a single government-owned invention for use in fighter aircraft which, over the period, netted us an average annual income above \$200,000 and then abruptly fell to about \$30,000. Since then we have been successful in markedly broadening our base of licensed inventions and in escaping dependence on a single large earner. We now have several rather recently-licensed inventions with above-average prospects which are starting to provide revenue. Altogether we are confident that within the next two years or perhaps less - depending to some extent on the general business climate - our annual operating position will turn around and be sustained in a net profit position.

Meantime, during the past year we are pleased to believe that our Corporation again made substantial progress in our Object of assisting in bringing the licensable products of publicly-financed and performed research into use for the public benefit and that we were able to do so without additional cost to the taxpayer.

In accordance with the Financial Administration Act our Company's operating budget for the 1970-71 fiscal year has been approved by you in your capacity as President of the Treasury Board.

Yours faithfully,

A handwritten signature in dark ink, appearing to read "B.G. Ballard". The signature is written in a cursive, slightly slanted style.

B.G. Ballard,
President.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS



AUDITOR GENERAL OF CANADA

Ottawa, June 8, 1970.

The Honourable C. M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1970. In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

A. M. Henderson,
Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1970
(with comparative figures as at March 31, 1969)

	<u>Assets</u>	
	<u>1970</u>	<u>1969</u>
Cash	\$ 1,151	\$ 79,995
Accounts receivable (Note 1)	74,299	87,890
Interest accrued on investments	14,988	16,872
Investment in bonds of, or guaranteed by, Canada, at cost (market value, March 31, 1970, \$911,045; March 31, 1969, \$977,953)	991,933	1,066,495
Prepaid promotion expense	112,500	122,500
Experimental equipment on loan to licensees, under shared development program, at nominal value	1	1
	<u>\$ 1,194,872</u>	<u>\$ 1,373,753</u>

The accompanying notes are an integral part of the financial statements.

Approved on behalf of the Board:

sgd B. G. Ballard
.....
Director

sgd K. F. Tupper
.....
Director

Liabilities

	<u>1970</u>	<u>1969</u>
Accounts payable	\$ 239,464	\$ 318,090
Royalties paid in advance	1,385	1,726
Equity of Canada:		
Capital Stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance at beginning of year	\$ 757,738	923,289
Add: Net adjustment of prior		
year's royalties	<u>14,830</u>	<u>21,333</u>
	772,568	944,622
Deduct: Net loss for the year,		
per Statement of		
Income and Expense	<u>114,744</u>	<u>186,884</u>
	<u>657,824</u>	<u>757,738</u>
	<u>954,023</u>	<u>1,053,937</u>
	<u>\$ 1,194,872</u>	<u>\$ 1,373,753</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 8, 1970, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd A.M. Henderson

 Auditor General of Canada

Statement of Income and Expense for the year ended March 31, 1970
(with comparative figures for the year ended March 31, 1969)

	<u>1970</u>	<u>1969</u>
<u>Income</u>		
Royalties, licensing fees, etc.	\$ 451,701	\$ 378,303
Less: Costs of licensing rights and related technical assistance, etc.	<u>123,256</u>	<u>82,334</u>
	\$ 328,445	295,969
Interest earned	55,355	57,652
Income from agency agreements	45,044	22,576
Development assistance recovered	5,535	-
Miscellaneous income	<u>-</u>	<u>2,856</u>
	434,379	379,053
<u>Expenses</u>		
Salaries (Note 2)	250,255	221,919
Patent attorneys' fees and other patenting costs	102,298	75,805
Development assistance	71,782	170,418
Rent	46,583	24,466
Awards to inventors	20,834	15,788
Promotion	20,318	20,359
Services provided by National Research Council	15,600	8,800
Office stationery, supplies, printing, equipment and furnishings	8,666	15,106
Travel	6,207	6,408
Communications	4,390	2,252
Miscellaneous	<u>2,190</u>	<u>4,616</u>
	<u>549,123</u>	<u>565,937</u>
Net Loss	<u>\$ 114,744</u>	<u>\$ 186,884</u>

The accompanying notes are an integral part of the financial statements.

Notes to financial statements

1. Accounts receivable

Not included are net royalties, earned since 1963 and estimated at \$13,000, withheld by a foreign licensee pending satisfactory settlement of a patent infringement, which dispute was settled in March 1970.

2. Salaries

Salaries for 1970 include remuneration of directors as directors, officers or employees, \$8,250.

3. Commitments

The Company had outstanding commitments amounting to \$48,018 as at March 31, 1970 in respect of its development program.

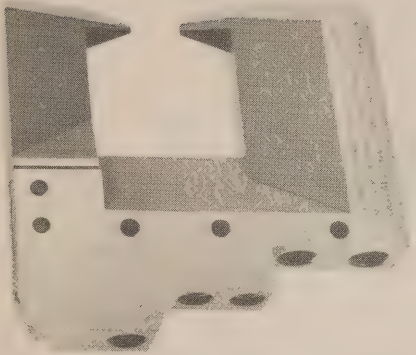
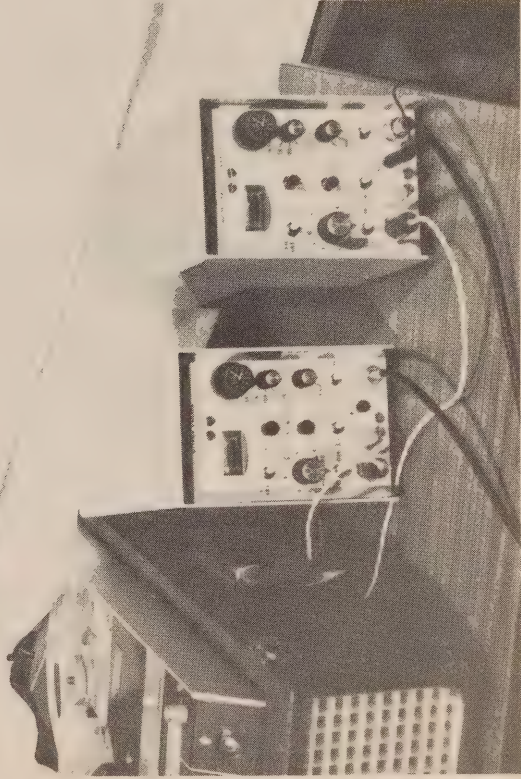
4. Contingent liability

A contingent liability of approximately \$34,500 exists with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.



Self-propelled vehicle operating on automatically tensioned highline replenishes ships underway day or night.

Navette automotrice se-déplaçant, de nuit comme de jour, sur un câble à tension asservie entre deux navires en marche.



Rugged instrument with no moving parts accurately senses velocities of gases and fluids.

Capteur de précision mesurant les vitesses de fluides; il est robuste et ne comporte aucune pièce mobile.

Low level electrical activity at scalp is monitored with inherent low noise in presence of electrical interference.

Enregistrement de la faible activité électrique au niveau du cuir chevelu, accompagné d'un faible bruit et soumise à des interférences.

1. Comptes à recevoir

Ne sont pas comprises les redevances nettes gagnées depuis 1963, estimées à \$13,000, retenues par un concessionnaire étranger dans l'attente du règlement satisfaisant d'un différend relatif à une contrepartie de brevet, différend réglé en mars 1970.

2. Traitements

Les traitements de l'année 1970 comprennent la rémunération des administrateurs à ce titre, ou à titre de membres de la Direction ou d'employés, \$8,250.

3. Engagements

Au 31 mars 1970, la Société avait des engagements en cours se chiffrant à \$48,018 à l'égard de son programme de développement.

4. Passif éventuel

Il existe un passif éventuel d'environ \$34,500 à l'égard d'impôts qui n'ont pas été déduits à la source sur les redevances versées par un concessionnaire étranger.

Passif

Comptes à payer	\$ 239,464	\$ 318,090
Redevances payées d'avance	1,385	1,726
Avoir de l'Etat:		
Capital-actions:		
Autorisé - 10,000 actions sans		
valeur nominale		
Emis - 5,000 actions, entièrement		
libérées	296,199	296,199
Excédent:		
Solde au début de l'année	\$ 757,738	923,289
Ajouter:		
Rajustement net du revenu		
de redevances de l'année	14,830	21,333
antérieure	772,568	944,622
Déduire:		
Perte nette de l'année,		
d'après l'état des		
revenus et dépenses	114,744	186,884
	657,824	757,738
	954,023	1,053,937
	\$ 1,194,872	\$ 1,373,753

J'ai examiné le bilan ci-dessus et l'état des revenus et dépenses s'y
afférant et le 8 juin 1970, j'en ai fait rapport au Président du Comité des
recherches scientifiques et industrielles du Conseil privé.

L'auditeur général du Canada,

signé A. M. Henderson



AUDITEUR GÉNÉRAL DU CANADA

Ottawa, le 8 juin 1970.

L'Honorable Charles Mills Drury,
Président du Comité des recherches
scientifiques et industrielles du
Conseil privé,
Ottawa.

Monsieur le Président,

J'ai l'honneur de vous informer que j'ai examiné les comptes et les états de situation de la Société canadienne des brevets et d'exploitation, limitée, pour l'année financière terminée le 31 mars 1970. Conformément aux dispositions de l'article 87 de la Loi sur l'administration financière je viens vous rendre compte qu'à mon avis:

- a) La Société a tenu des livres de comptabilité appropriés;
- b) Les états financiers de la Société

- i) ont été préparés sur une base conforme à celle de l'année précédente et sont en accord avec les livres de comptabilité
- ii) dans le cas du bilan, présentent de façon exacte et juste la situation de la Société en fin d'exercice, et
- iii) dans le cas de l'état des revenus et des dépenses, présentent de façon exacte et juste ses revenus et dépenses de l'exercice; et

- c) Les opérations financières de la Société qui sont venues à ma connaissance ne sont pas sorties du cadre des pouvoirs dont dispose la Société aux termes de la Loi sur l'administration financière et de toute autre Loi pertinente.

Je vous prie d'agréer, Monsieur le Président, l'assurance de mes meilleurs sentiments.

L'Auditeur général du Canada,
signé A. M. Henderson

RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

élargir notablement les domaines de nos licences et à ne plus dépendre que d'une seule source de revenus importants. Nous avons actuellement plusieurs inventions récemment brevetées dont le potentiel est au-dessus de la moyenne et qui commencent à nous procurer des revenus. Nous sommes, dans l'ensemble, persuadés qu'au cours des deux années à venir ou peut-être avant -- et cela dépendra dans une certaine mesure du climat général des affaires -- que la situation de notre Société sera inversée et que nous enregistrerons un net bénéfice.

Quoi qu'il en soit, nous pensons que notre Société a de nouveau accompli au cours de l'année passée des progrès importants dans le cadre de sa mission qui est de faire bénéficier le public des produits licenciables issus de recherches effectuées dans les laboratoires fédéraux et subventionnées par l'Etat et que cela s'est fait sans frais supplémentaires pour le contribuable.

En votre qualité de Président du Conseil du Trésor et conformément à la Loi sur l'Administration financière, vous avez approuvé le budget d'exploitation de notre Société pour l'exercice budgétaire 1970-71.

Je vous prie de bien vouloir agréer, Monsieur le Ministre, l'expression de mes sentiments respectueux.

B. G. Ballard
Le président,
B. G. Ballard.

Si nous étudions maintenant le poste des dépenses, nous constatons que les salaires en constituent toujours l'élément le plus important. L'augmentation de 28,000 dollars correspond surtout à des révisions de salaire pour compenser l'augmentation du coût de la vie, bien que nous ayons également embauché un agent supplémentaire pour notre Service de lancement et d'exploitation.

En dehors de l'augmentation de 25% des frais juridiques et autres, j'ai déjà souligné plus haut la très importante augmentation du nombre des demandes de brevets. Les démarches afférentes à l'obtention d'un brevet pour certaines inventions se sont avérées plus difficiles et plus coûteuses que prévu. Nous sommes également trouvés dans l'obligation de faire face à une augmentation du coût des prises de brevets auquel d'autres frais se sont ajoutés.

Pour la première fois l'année dernière, après avoir transféré nos bureaux du Conseil national de recherches du Canada, dans la banlieue est d'Ottawa, au centre de la ville, nous avons dû payer une année entière de loyer tout en ayant à supporter des frais supplémentaires de services et de fournitures que nous devons nous procurer en prenant des dispositions plus coûteuses.

Bien que le déficit de 114,744 dollars enregistré par notre Société soit de 72,000 dollars inférieur à celui de 1968-69, l'augmentation des dépenses qui a été une fois encore la raison majeure de cet état de choses, provient des frais de locaux et de facteurs de coût de la vie qu'il nous était impossible d'éviter ainsi que des sommes, d'un montant supérieur à l'ordinaire, que nous avons engagées pour le développement des inventions. Cependant, comme nous l'avons déjà indiqué, les bénéfices de ces investissements de développement commencent maintenant à se matérialiser et ils ne manqueront pas de croître.

En analysant l'ensemble de la situation financière de notre Société et des possibilités futures, je dois signaler qu'au cours de la période 1961 à 1965, ses recettes n'ont dépendu que d'une seule invention appartenant au gouvernement et qui nous a rapporté au cours de cette période un revenu annuel moyen supérieur à 200,000 dollars pour ensuite retomber brutalement à environ 30,000 dollars. Depuis lors nous avons réussi à

de la technologie alimentaire était la première du genre au Canada et bien que de dimensions relativement modestes, elle nous a permis, pour la première fois, d'établir des contacts avec des personnes de l'industrie alimentaire et de leur présenter des inventions susceptibles de répondre à certains de leurs besoins. Les expositions sur la production et sur l'électrique ont reçu un nombre important de visiteurs, les stands ont suscité un niveau d'intérêt très satisfaisant et ont fait l'objet de demandes de renseignements très sérieuses.

Nous avons continué nos négociations avec deux compagnies fabriquant des produits comportant des contre-façons de plusieurs de nos brevets. Dans un cas particulier, la compagnie a payé une somme forfaitaire pour les articles déjà fabriqués, a pris une licence en vue d'une autre fabrication et s'est engagée soit à cesser la fabrication d'une autre invention ou d'en acquiescer la licence si elle décidait de continuer cette fabrication. Dans un autre cas, la compagnie mère américaine a entrepris des négociations pour acheter certains éléments de l'invention à un de nos licenciés. Bien que la filiale canadienne ne se soit pas engagée à cesser la contre-façon, nous pensons que si un accord satisfaisant peut-être négocié entre la compagnie mère américaine et notre licence, la compagnie canadienne serait disposée à conclure un accord similaire.

Si nous examinons maintenant le rapport financier de notre Société et le procès verbal y annexé du Vérificateur général des comptes, nous constatons par notre Etat des revenus et dépenses que nos revenus bruts et nets provenant de redevances et de licences ont augmenté par rapport à l'année précédente mais que le coût de nos cessions de licences ont accusé proportionnellement une augmentation nettement plus élevée. Ceci est surtout dû au fait qu'au cours des dernières années une invention provenant d'une université est devenue notre plus importante source de redevances et que ces revenus ont atteint un niveau auquel nous en versions 85% à l'université. Nous avons commencé l'année dernière à recouvrer les sommes, très supérieures à la moyenne des trois années précédentes, que nous avions engagées pour développer nos inventions. Nous prévoyons que les revenus provenant de ce secteur augmenteront substantiellement au cours de l'année prochaine et des années suivantes.

Produit pour attirer les abeilles — Préparation sous basse température de tamis moléculaires au carbone — nous avons accordé une aide supplémentaire pour le développement de ces deux dernières inventions et pour la fabrication d'échantillons du produit, de façon à encourager des fabricants à nous en demander la licence.

En février 1970, le Ministère de l'Industrie et du commerce a annoncé la révision de son programme pour l'avancement de la technologie industrielle (PATI), ce qui aura pour effet, nous l'espérons, de le rendre plus intéressant pour nos licenciés.

Notre Service d'exploitation et de lancement peut entreprendre une campagne de publicité pour une invention, en vue d'en accorder une licence, dès réception de la première demande de brevet. C'est ainsi qu'au cours de l'année écoulée nous nous sommes occupés du lancement de 69 nouvelles inventions; ceci représente une augmentation d'une unité par rapport à l'année précédente pour laquelle on avait noté une augmentation de six de plus qu'en 1967-68. Nous avons accordé 27 nouvelles licences à l'industrie au cours de l'année. Durant les quatre dernières années, le nombre d'inventions pour lesquelles la SCBE a accordé des licences a été supérieur de 40% à celui des nouvelles inventions enregistrées. Au 31 mars 1970, le nombre des licences accordées portait sur un total de 258 inventions (réparties entre 155 compagnies différentes et dont 147 nous rapportaient des redevances), soit une augmentation nette de quatre par rapport au chiffre atteint à la fin de l'année précédente.

Quarante-huit titres (comparativement à trente-et-un en 1968-69) ont été rayés de notre registre des brevets par suite d'octrois de licences, d'expiration de validité et de caducité, laissant 776 inventions licenciables.

Notre Société a participé l'année dernière à plusieurs expositions industrielles dont celles de la production, à Toronto, en juin; de la technologie alimentaire, à Ottawa, également en juin, et de l'électronique, à Toronto, en octobre. L'exposition

nécessaires ont été prises pour commencer la production en séries au début de l'été s'il se confirme, comme le prévoit nos licences, que cet instrument sera largement utilisé; l'aide apportée par notre Société pour sa mise au point aura été déterminante dans la simplification et réalisation rapide de l'un des éléments médicaux-chirurgicaux les plus complexes et les plus onéreux et pourtant aura contribué à élargir les possibilités de la chirurgie en général.

La Société a également accordé une aide financière à des licences pour le développement des matériels et produits suivants dont les résultats se sont avérés encourageants:

Séchage par micro-ondes -- nos deux licences continuent à trouver de nouvelles applications à ce procédé et à recevoir des commandes en nombre croissant.

Sonde directe d'oxygène -- ce dispositif permettant de mesurer rapidement le contenu en oxygène des métaux en fusion en est maintenant au tout premier stade de production. Il suscite un intérêt mondial et son avenir commercial apparaît très prometteur.

Pont comparateur de courant continu et potentiomètre basés sur un comparateur de courant continu -- ces appareils de mesures électriques ultra précis ont suscité un intérêt mondial.

Amplificateur à très bas niveau de bruit -- au cours de l'année notre licence a achevé la fabrication d'une petite série de cet instrument qui permettra aux laboratoires et hôpitaux de procéder à des analyses biologiques et à des diagnostics. Il semble constituer un nouvel élément de valeur dans ce domaine et notre licence est très optimiste quant à l'accueil qui lui sera réservé.

notre Société doit donc généralement déterminer la nature et l'importance des perfectionnements qu'il faudra lui apporter avant d'en entreprendre la fabrication. Dans nombre de cas, le bénéficiaire de la licence acceptera ou pourra être persuadé d'accepter qu'une clause, garantissant qu'il apportera à l'invention les développements techniques jugés indispensables, soit incluse dans le contrat. La SCBE a prévu, dans ce cas, de le dédommager soit en lui en cédant les droits exclusifs pendant une période appropriée, soit en réduisant les redevances qu'il devra verser ou encore par une combinaison de ces dispositions ou autres accords similaires. Conformément à sa mission qui est de faire en sorte que "le public bénéficie davantage des inventions, par le canal de l'industrie", notre Société pourra être amenée, en d'autres occasions à prendre en charge les frais d'une certaine partie du développement technique, ou elle conclura un accord avec le bénéficiaire pour le partage des frais de mise au point d'un ou plusieurs prototypes ou d'une installation pilote destinés à la fabrication d'échantillons ou à l'essai ou à la démonstration de l'invention dans les conditions normales d'emploi ou de fabrication.

Au cours de l'exercice 1969-70, la SCBE a consacré un total de 71,782 dollars à l'exploitation de ses brevets. Cette somme représente une diminution d'environ 100,000 dollars par rapport à 1968-69 mais environ 8,000 dollars de plus qu'en 1967-68. Sur le total de l'année dernière, environ 40,000 dollars ont été dépensés sous forme de participation aux frais que les sociétés auxquelles nous avons accordé une licence ont encourus pour le lancement des inventions couvertes par les dites licences. Le solde de 31,500 dollars servit à améliorer certaines inventions pour en faciliter le lancement en suscitant des demandes de licence.

La mise au point de l'instrument de suture vasculaire dont nous avons parlé au cours de chacune des quatre années précédentes a continué à présenter de nouveaux et difficiles problèmes techniques. Une grande partie de l'année dernière a été employée à résoudre le problème que présentait le placage des manchons en plastique incorporant les enclumes, à l'aide d'un revêtement métallique suffisamment homogène et dur permettant aux pointes des aigres en tantale de se recourber pendant l'agrafage. Il semble que l'on soit parvenu à surmonter tous ces problèmes vers la fin de l'année et les dispositions

Au 31 mars 1970, notre Service des brevets avait obtenu des brevets pour 774 inventions différentes et 389 autres demandes de brevets étaient en instance.

Il nous faut préciser que la SCBE se charge de faire breveter la plupart des inventions émanant de l'EACL, mais qu'elle conserve les droits d'exploitation des brevets. Au moment où la SCBI dépose les demandes de brevet, notre Service d'exploitation étudie l'invention pour déterminer si elle pourrait être exploitée commercialement. Au cours de l'exercice budgétaire qui vient de s'écouler, la SCBE a entrepris l'exploitation commerciale de deux inventions de l'EACL, sur un total de 14 qui avaient été proposées. Les autres inventions ressortissaient directement de la technologie des réacteurs nucléaires et sont exploitées par l'EACL.

On doit savoir également que le Ministère de la Défense nationale se charge de faire breveter toutes inventions émanant de ses Services. Le lancement, l'exploitation et l'octroi de licences pour les inventions qui, de l'avis du Ministère de la Défense sont susceptibles d'être exploitées commercialement, sont confiés à la SCBE qui paie les frais d'octroi du brevet et les frais de renouvellement dans tous les pays autres que ceux où le brevet touche au domaine militaire.

Dans la plupart des pays, la durée de validité d'un brevet est d'environ 17 ans et le nombre des premiers brevets détenus par la SCBE dont la validité arrive à expirations'accroît rapidement. Parfois aussi, les anciens brevets ont été remplacés par de nouvelles inventions et n'ont plus de valeur commerciale.

Quant aux réalisations de l'année dernière dans les domaines du développement technique, du lancement et de l'octroi de licences d'exploitation des inventions, il serait bon de préciser, tout d'abord, que la majeure partie des inventions qui nous sont soumises viennent d'établissements de recherches subventionnés à même des deniers publics et ne disposant pas des installations ou des fonds nécessaires à la poursuite de leurs travaux jusqu'au stade ultime, c'est-à-dire jusqu'à ce que l'emploi du dispositif, du procédé ou de la substance puisse être généralisé. Avant de lancer une invention sur le marché

mêmes marquant relevés dans ce secteur a été le nombre relativement constant d'inventions communiquées au cours des quatre dernières années par la plupart des ministères et organismes fédéraux d'une part, et d'autre part, l'augmentation soutenue au cours des deux années passées de celles émanant des universités. Parmi l'ensemble des universités ayant déposé des demandes d'évaluation en 1969-70, une en déposa 11 et deux autres 7 et 6 respectivement. Cinq universités en déposèrent quatre ou plus et neuf autres en déposèrent jusqu'à trois chacune. Des communications nous parvinrent d'un total de dix-sept universités et collèges, comparativement à 15 l'année précédente et à 12 en 1967-68.

Quarante pour cent des demandes d'évaluation de brevets qui nous furent adressées concernaient divers types d'instruments (dont la moitié devait servir à effectuer des mesures et des essais quelconques), vingt pour cent exécutaient des opérations telles que triage, malaxage, formage, usinage d'outils, apprêt de divers matériaux, transport, maintenance, etc. dix pour cent étaient consacrées à l'électricité/électronique, à la chimie/métallurgie et à la mécanique. Les dix pour cent restants se répartissaient entre les secteurs essentiels suivants: pharmaceutique, alimentaire, agricole, etc; textile, papeterie et construction. Ces pourcentages ont relativement peu varié au cours de ces dernières années. Les inventions qui ont reçu une très grande publicité de la part de l'industrie et pour lesquelles celle-ci a manifesté un intérêt exceptionnel l'année dernière provenaient de l'Etablissement du Conseil de recherches pour la défense, à Valcartier. Elles touchent d'importants progrès dans le domaine des lasers à gas.

Au cours de l'exercice, la SCBE a déposé des demandes de brevets préliminaires pour 74 inventions différentes, comparativement à 64 en 1968-69 et à une moyenne annuelle de 65 au cours des quatre années précédentes. Parmi les 74 premières demandes déposées l'année dernière 34 le furent par le Service des brevets de la SCBE et les suivantes furent réparties entre diverses agences de brevet canadiennes. En outre, la SCBE a déposé 176 demandes dans d'autres pays, comparativement à 139 l'année précédente et a poursuivi des démarches pour environ 400 autres demandes déposées précédemment. La SCBE a jusqu'à ce jour déposé des demandes de brevets dans 59 pays différents.

Cependant, l'exercice précédent avait fait ressortir une augmentation de 21%, comparée à une progression moyenne annuelle de 9% calculée sur les trois années précédentes. Les demandes d'évaluation reçues au cours de la période 1969-70 ne font que rétablir l'ancienne moyenne de 9% calculée sur une plus longue période. Chacune de ces demandes d'évaluation nécessite une étude et des recherches poussées avant que l'on puisse prendre une décision quant à l'opportunité de déposer une demande de brevet et, le cas échéant, choisir le pays où la demande devrait être déposée en premier lieu. Il faudra éventuellement, par la suite, choisir les pays dans lesquels il y aurait avantage à déposer une demande de brevet pour chaque invention. Un peu plus tard, il s'agira de déterminer s'il est avantageux de continuer à payer les frais annuels de renouvellement du brevet de chaque invention dans chaque pays. Il se peut également que l'on doive décider ultérieurement s'il vaudrait la peine d'encourir des frais de poursuites pour faire valoir ou faire respecter les droits d'un brevet dans un pays déterminé.

Nous avons reçu des suggestions de différentes origines pour que nous étudions s'il était possible de mettre sur pied et d'appliquer un accord permettant de faire des essais biologiques centralisés sur de nouveaux composés au Canada et grâce à des recherches subventionnées par l'Etat, de les breveter et d'offrir à l'industrie canadienne, en priorité, la possibilité d'acquiescer une licence pour les produits intéressants. Travaillant en collaboration avec le Conseil des recherches médicales, nous avons, au cours de l'année, consacré un temps considérable à l'étude de cette question.

J'ai déjà mentionné plus haut que la SCBE a reçu l'an dernier 206 demandes d'évaluation de brevets d'inventions. Sur ce total, 42 (38 en 1968-69) provenaient du Conseil national de recherches du Canada; 27 (même nombre qu'en 1968-69) du Ministère de la Défense nationale; 16 (24) de l'Énergie atomique du Canada limitée; 16 (15) du Ministère de l'Énergie, des mines et des ressources; 14 du Ministère des pêcheries et des forêts; 8 du Ministère de la santé nationale et du bûcheron; 4 (3) du Ministère de l'Agriculture et 10 de cinq autres ministères fédéraux, soit un total de 137 inventions émanant du secteur fédéral; 59 (69 en 1968-69) d'universités; aucune (11 en 1968-69) de sociétés appartenant au gouvernement fédéral; 4 (5) d'instituts de recherches provinciaux et 6 d'autres sources. Un des phéno-

de certaines inventions appartenant à l'autre. Des accords similaires ont depuis lors été passés avec des organismes homologues, en Inde et en Afrique du Sud.

La promulgation en 1954, par le Gouvernement fédéral, de la Loi régissant les inventions des fonctionnaires et qui stipulait entre autres que les ministres étaient habilités à céder à notre Société les droits que l'Etat détenait sur les inventions de son personnel, ouvrit la voie qui devait amener la SCBE à devenir le principal organisme chargé du brevetage et de la vente des licences d'exploitation des inventions pour le compte du Gouvernement canadien.

La SCBE est maintenant en mesure de s'occuper des inventions provenant de tous les ministères et organismes publics canadiens. Elle a en effet reçu à ce jour des inventions émanant de 28 ministères et organismes fédéraux sur un total de plus de cent. Elle a en outre conclu des ententes avec 20 universités et collèges canadiens, ainsi qu'avec 13 organismes de recherches, provinciaux ou autres, subventionnés en totalité ou en partie par les fonds publics.

Nous sommes loin d'être certains que les chercheurs canadiens ont pleinement conscience de l'importance, tant pour eux que pour l'économie canadienne, d'une communication préalable de leurs découvertes brevetables à l'organisme habilité. Au cours du dernier exercice, la SCBE a développé, dans ce sens, son programme d'encouragement des chercheurs en leur remettant une réplique stylisée en argent du penseur Rodin, symbole officiel de notre Société. La remise de cet insigne était accompagnée d'un certificat officiel autorisant son port par l'inventeur dont l'invention avait pu être brevetée et avait fait l'objet d'une proposition de licence. Nous avons reçu de nombreuses lettres de récipiendaires enchantés de recevoir cette distinction. Nous pensons que ce programme servira non seulement à fournir aux inventeurs un témoignage supplémentaire de reconnaissance bien méritée mais qu'il les encouragera également à nous faire part de leurs découvertes.

Au 31 mars 1970, la SCBE avait reçu de l'ensemble des organismes avec lesquels elle a passé des accords, un total de 2659 demandes d'évaluation de brevets d'inventions dont 206 lui étaient parvenues au cours de l'exercice budgétaire 1969-70; soit 21 de moins qu'au cours de l'exercice précédent.

plus alléchantes pour les licences éventuels, lançait les inventions et vendait des licences d'exploitation à l'industrie, percevait les redevances qui en découlaient et se servait de ces sommes pour verser une rétribution aux inventeurs, couvrir ses frais d'exploitation et pour apporter des perfectionnements ultérieurs aux inventions.

En 1948, il fut décidé que la Loi régissant l'exploitation des sociétés d'Etat s'appliquerait dorénavant à la SCBE, et, cette même année, la Société acceptait de se charger des inventions provenant d'organismes publics autres que le Conseil. Le premier ministre fut celui de la Restauration économique et de l'Apvisionnement. Au cours de la même année, la SCBE prit des mesures, à la demande des universités dans chaque cas, pour conclure avec ces dernières des ententes en vertu desquelles la SCBE s'occuperait de leurs découvertes brevetables ou pouvant fournir matière à brevet.



DR. B.G. BALLARD

En 1951, la SCBE conclut sa première entente avec un organisme provincial de recherches. Cet accord chargeait la Société de l'obtention des brevets, du développement technique et du lancement de ses inventions ainsi que de la vente des licences d'exploitation à l'industrie.

En 1952, la Société conclut avec le National Research Development Corporation du Royaume-Uni une entente en vertu de laquelle chacune des deux parties, en retour d'un certain pourcentage de toute redevance reçue, s'occuperait du lancement

Ottawa, le 25 juin 1970.



L'honorable C. M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

Monsieur le Ministre,

Conformément à l'article 85 (3) de la Loi sur l'administration financière, j'ai l'honneur de vous présenter, au nom du Conseil d'administration, le Rapport annuel de la Société canadienne des brevets et d'exploitation, limitée, pour l'exercice qui s'est terminé le 31 mars 1970, de même que l'état des finances et le rapport de l'Auditeur général du Canada.

En bref, les fonctions de la SCBE sont de rendre mieux accessibles au public, par l'intermédiaire de l'industrie les produits licenciables mis au point grâce à des programmes de recherches financées par un organisme public et réalisées dans un organisme public ou dans un établissement privé.

La SCBE a été créée en 1947 par le Conseil national de recherches du Canada (CNRC), et elle s'est vue confier la tâche d'obtenir des brevets d'invention et de vendre des licences d'exploitation pour les inventions résultant, pour la plupart, de travaux de recherches menés dans les laboratoires du CNRC pendant la Deuxième guerre mondiale. A cette fin, la SCBE étudiait les inventions qui lui étaient soumises en vue de déterminer s'il y avait matière à brevet, déposait dans divers pays des demandes de brevet pour les inventions jugées brevetables, mettait au point certaines inventions, seule ou avec l'aide d'autres organismes, afin d'en faire ressortir l'utilité ou de les rendre

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P. A. Miller

Brevets
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A. A. Thomson
F. W. Lemon
R. G. Bitner

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Sous-ministre,
Ministère de l'Industrie et du
Commerce.

SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE
(S B E C)

RAPPORT ANNUEL
1970

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RAPPORT ANNUEL

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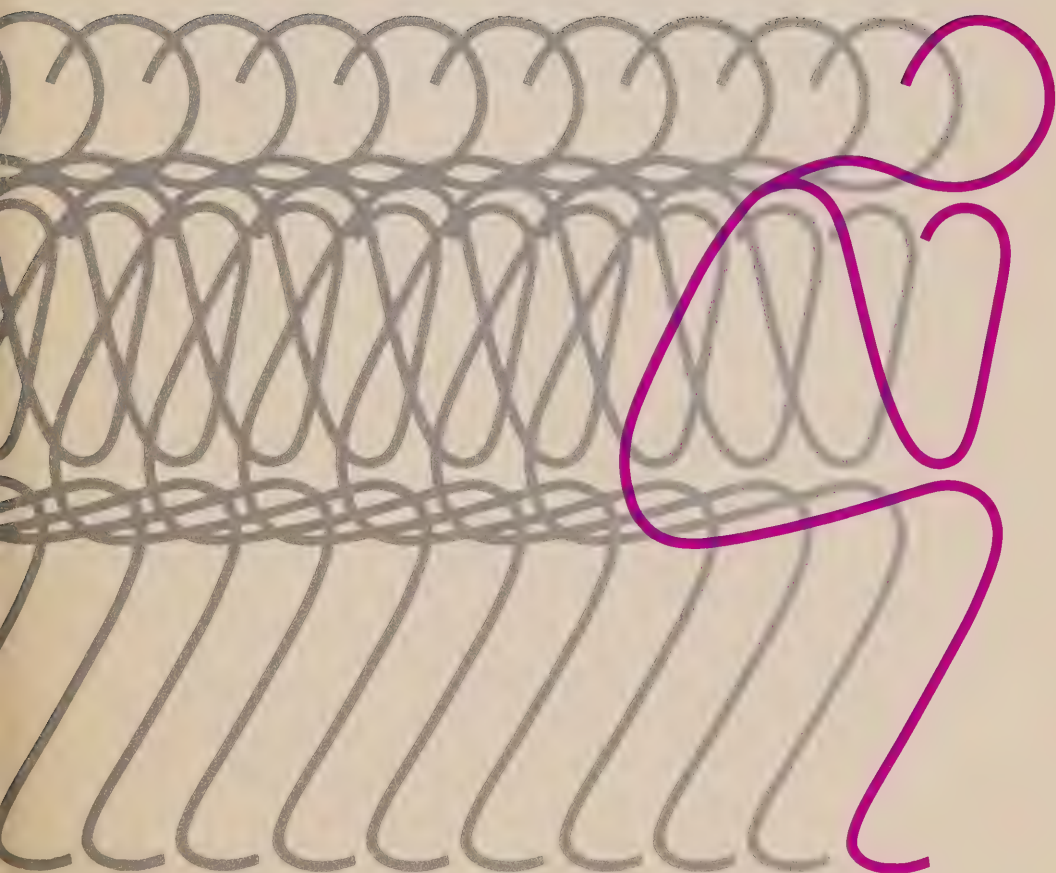


ANNUAL REPORT 1971

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CANADIAN PATENTS AND DEVELOPMENT LIMITED

ANNUAL REPORT

1971

CANADIAN PATENTS AND DEVELOPMENT LIMITED

(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 16 June 1971

The Honourable C.M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Sir,

In accordance with Section 85(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1970-71. The Company's Financial Statement and the Report of the Auditor General are included.

R. D. Hiscocks,
President.

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Administration	L. Lipke, Chief
Accounts	H. A. Scharf

AUDITOR	The Auditor General of Canada
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BANKERS	The Canadian Imperial Bank of Commerce
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HEAD OFFICE	275 Slater Street Ottawa, Ontario K1A 0R3
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Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the licensable products of publicly financed and publicly or institutionally-performed research.

CPDL was brought into being by the National Research Council of Canada (NRC) in 1947 to handle inventions which had accumulated largely from NRC research during the Second World War. To this end CPDL examined inventions for patentability, made filings for patents in the patent offices of various countries on those inventions which were deemed to qualify, developed alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential licensees, promoted and licensed inventions to industry, collected royalties thereon and from these provided cash awards to the inventors, defrayed costs of CPDL's operations and used its funds to assist in further development of inventions.

In 1948 it was proclaimed that the Government Companies Operation Act was applicable to CPDL and in the same year the Company accepted the handling of inventions arising from government departments other than NRC. The first such department was the Department of Reconstruction and Supply. In the same year CPDL made provision for entering into agreements with universities, at the request of the university in each case, to handle their patentable or possibly-patentable material.

In 1951 CPDL concluded its first agreement to handle the patenting, development, promotion and licensing of inventions for a provincial research organization.

In 1952 CPDL entered into an agreement with the National Research Development Corporation of the United Kingdom whereby in return for a percentage of any royalty income received each would handle the promotion of certain cases belonging to the other. Similar agreements exist between CPDL and similar government organizations in India and South Africa.

The enactment of the Public Servants Inventions Act in 1954 by the federal government which, inter alia, specified that Ministers were empowered to transfer the administration and control of inventions to our Company, opened the way to CPDL becoming the Canadian government's prime patenting and licensing agency.

Today CPDL is eligible to accept and handle the administration and control of inventions arising in all Canadian government departments and agencies. Over the years CPDL has, in fact, received inventions from 29 out of a total of over 100 such departments and agencies. In addition the Company has Agreements with 23 Canadian universities and colleges and with 14 provincial and other organizations operating wholly or largely under public financing.

Our Agreements with all universities contain the same terms and conditions. However the dates on which they were entered into extend over several years and thus so do their expiry dates. On this account our Agreements with eleven universities were due to expire on 31 March 1971. Arrangements were made to extend them in their present form until 31 March 1972 and meantime to review jointly and agree on the terms which should be embodied in the standard form of Agreement which would be entered into on 1 April 1972.

We are not at all sure that researchers in Canada are fully conscious of the importance both to their own benefit and to the benefit of the Canadian economy of disclosing any possibly patentable discoveries first into the patent system. During the year CPDL continued its program for encouraging researchers in this direction by presenting silver lapel pins bearing replicas of our Corporation's official symbol "The Inventor" and formal certificates granting the right to wear our symbol to inventors on whose inventions we had been able to obtain issue of patent and which we had promoted for licensing. Since we started this program in 1969 we have presented a total of 490 such lapel pins and certificates. We have continued to receive many delighted replies from the recipients. We believe this program will serve not only to provide inventors with some further measure of well-deserved recognition but also give added incentive to disclose their inventions.

As at 31st March 1971 CPDL had received, from all sources, an accumulated total of 2908 proposals for assessment of which 249 were received during 1970-71. This was 43 more than in 1969-70. This was an increase of almost 4% above the 9% average annual increase over the last five years. Each of these proposals required careful screening and appraisal prior to decision on whether to file an application for patent and, if so, in which country first. Subsequently decisions will be required on which additional countries, if any, to apply for patent on each invention; and, still later, on whether paying the annual renewal fees on each patent in each country is still worth while. Later still a question may arise on any patent of whether it is worth the litigation costs to assert or defend it in any country.

Suggestions had come from a number of directions during 1969-70 that our Corporation should explore the question and the practicabilities of establishing and operating an arrangement which would provide the centralized biological testing of new compounds arising in Canada from publicly-financed research and of patenting and offering first to Canadian industry the opportunities to license those which showed an attractive potential. During the year we were able to acquire a considerable amount of additional data which should prove valuable in reaching decision on this question.

It was mentioned above that CPDL last year received 249 disclosures of inventions for assessment. Of these, 55 (42 in 1969-70) originated with the National Research Council of Canada; 10 (27 in 1969-70) with the Department of National Defence (DND); 20 (16) from Atomic Energy of Canada Limited (AECL); 21 (16) from the Department of Energy, Mines and Resources (EMR); 18 (14) from the Department of Fisheries and Forestry (DF&F); 0 (8) from the Department of National Health and Welfare (NHW); 5 (4) from the Department of Agriculture (CDA); and 10 from among five other federal departments for an overall total of 139 from the federal government sector; 96 (59 in 1969-70) from universities; nil (nil in 1969-70) from federal proprietary corporations; 6 (4) from provincial research institutes and 8 from other sources. Among the features in this general area has been the relatively constant output over the last four years of the number of disclosures from the federal government departments and agencies on the one hand and the sustained increase over the last three years in the number from universities.

Among the universities forwarding proposals for assessment in 1970-71 one university forwarded 14 and another 13 and two others 10. Nine universities forwarded four or more and another eight forwarded up to three each. Altogether, disclosures were received from 17 universities and colleges compared with 17 the previous year and 15 in 1968-69.

Among the proposals for our assessment 40% were various types of instruments (of which one-half had to do with some kind of measuring or testing), 20% were performing operations, e.g. separating, mixing, shaping, machine tools, working of various materials, transporting, materials handling, etc.), 10% were devoted to each of electricity-electronics; chemistry/metallurgy; and mechanics. The remaining 10% were distributed among human necessities, e.g. drugs, foodstuffs, agriculture, etc.; textiles, papers and construction. These ratios have remained quite constant over the past several years.

We are pleased to report on the kindness of the Eastman Kodak Company (USA) in offering and later assigning to our Corporation, without charge, their Company's rights in six Canadian patents issued in 1970 on an artificial kidney system for home use which the Company had developed extensively over a period of nearly three years. We have been actively seeking a licensee willing to develop the system onwards into an efficient, low-cost model suitable for satisfying the great need for a system easily useable by a patient at home.

During the year CPDL filed first applications for patent on 57 different inventions. This compares with 74 in 1969-70 and an average of 67 per year over the previous four years. Of the 57 first filings made last year 35 were filed by CPDL's Patent Branch and the remainder were let out amongst various Canadian patent agent firms. In addition CPDL made 244 further applications in additional countries - compared with 176 the previous year - and continued the prosecution on about 400 previously filed applications. Over the years CPDL has made applications for patents in 61 different countries.

As at 31 March 1971 our Patent Branch had directly or through patent agent firms accumulated issue of patent on 968 different inventions.

It should be explained that whereas CPDL handles the patenting of most AECL inventions, AECL pays the costs and retains the title. At the time CPDL files application for patent our development and promotion staff makes an assessment on whether the invention is suitable for commercial exploitation. During the past fiscal year CPDL undertook commercial exploitation of four of the 20 which were offered. The remainder were directly related to nuclear reactor technology and are exploited by AECL.

It should also be explained that the Department of National Defence (DND) handles the patenting of all inventions arising in DND. The promotion, development and licensing of those inventions which in DND's opinion are releasable for commercial exploitation are turned over to CPDL which pays for the patenting and renewal costs in all countries beyond those where the patenting is needed for military purposes.

The life of a patent in most countries is approximately 17 years and the patents which were in CPDL's early holdings are now expiring at an increasing rate. In some other cases the older patents have been superseded by improvements and are no longer marketable.

Our Corporation's development and promotion branch is free to begin actively promoting an invention for licensing as soon as the first application for patent has been filed on it. During the past year 79 new inventions thus became available for licensing - an increase of 10 over the previous year which, in turn, was one more than in 1968-69. During the year 68 inventions were newly licensed to industry which was 41 more than the previous year. This abnormally large increase occurred through a combination of fortuitous circumstances and successes in sustained promotional efforts by our staff. Over the past four years CPDL has been successful in licensing its inventions at nearly 45% of the rate at which new inventions have been entering inventory. As at 31st March 1971 CPDL had licenses in force on a total of 261 inventions (among 144 different companies). This was a net increase of 4 licensed among a net decrease of 11 companies compared with the previous year.

Deletions due to licensing, expiry of patents and ob-

solescence resulted in the removal of 84 cases (compared with 48 in 1969-70) from our active list leaving a total of 750 available for licensing compared with 776 a year ago.

Turning now to last year's activities in the development, promotion and licensing of inventions I should first observe that nearly all our inventions come from publicly-funded, research-oriented sources which are neither organized nor have funds made available to carry a discovery - whether it be a device, process or substance - very far past the research stage along the development road towards readiness for general use. Thus, in marketing an invention, our Company commonly has to assess the nature and amount of development that will be required to put it into production. In many cases the licensee will be willing or can be persuaded to include the necessary development in the license agreement and, in these, CPDL provides opportunity for the licensee to recover his costs by making him the sole licensee for an appropriate period or by making allowances in the royalty rates; or by a mix of these or similar arrangements. In order to accomplish its Object of making the benefits of inventions "more available to the public, through industry" our Company, on other occasions, will pay the costs of certain portions of a development or it will enter into cost-sharing arrangements with a licensee in the development of prototype(s) or of a "pilot" facility for purposes of producing samples or of testing or demonstrating the invention under conditions likely to be met in commercial use or production.

The Company again exhibited in the Food Technology Show, this year in Windsor. Our booth was well attended and many useful contacts were made with the industry. The Canadian Chemical and Equipment Show was held in Toronto in September and again we had a successful exhibit. The new Design Engineering Show which had been planned for October was postponed to 1971 due to adverse business conditions. This will crowd our 1971 schedule (in which we plan on exhibiting at four trade shows) but can be managed.

During 1970-71 CPDL expended \$41,762 on the development of its inventions - a decrease of about \$30,020 below the 1969-70 total of \$71,782. \$36,000 of the 1970-71 total was on financial assistance to licensees for developing inventions they had licensed and \$5,762 was for improving inventions, i.e. preliminary development, to make them more attractive for licensing. The decrease from previous years in the amount of financial assistance to licensees reflects the increased use by our licensees of the PAIT program - as revised in February 1970. However the year's operations did show a continuing need for CPDL assistance in circumstances in which the amounts of individual support required quick responses and were in the order of \$35,000 or smaller. CPDL's success in licensing over double the number of inventions of any previous year but with need only for such a small amount of expenditure on preliminary development was unusual. However, our success in licensing a package of nine inventions can be traced directly to our considerable expenditures on their preliminary development over several previous years.

Development of the Vascular Suturing Instrument - a device which we believe will prove an unusually valuable boon to surgeons and their patients - was expected to be completed, as in our 1970 Report, in each of the two previous years. Our licensee is insisting on 100% reliability of the instrument in all circumstances and, although performance very close to this figure has consistently been reached in trials, further modification is being made. The cause of the occasional failure of a suturing staple to clinch properly has been identified exactly; and once again we are hopeful that this unusually meaningful instrument will go into full-scale production during 1971-72.

Among the more interesting submissions during the year was a new process for treatment of lignite coals which may make the huge deposits of this material suitable for use in power generating stations.

An unusual submission concerns a process for the treatment of wood to make it useable as a feed for ruminant animals.

A new development in the microwave drying field has made possible the rapid transmission of maps or other documents in colour.

A group of inventions is developing around processes for treatment of ores and recovery of metals by liquid-liquid extraction techniques. These may also have application in waste treatment and recycling of metals.

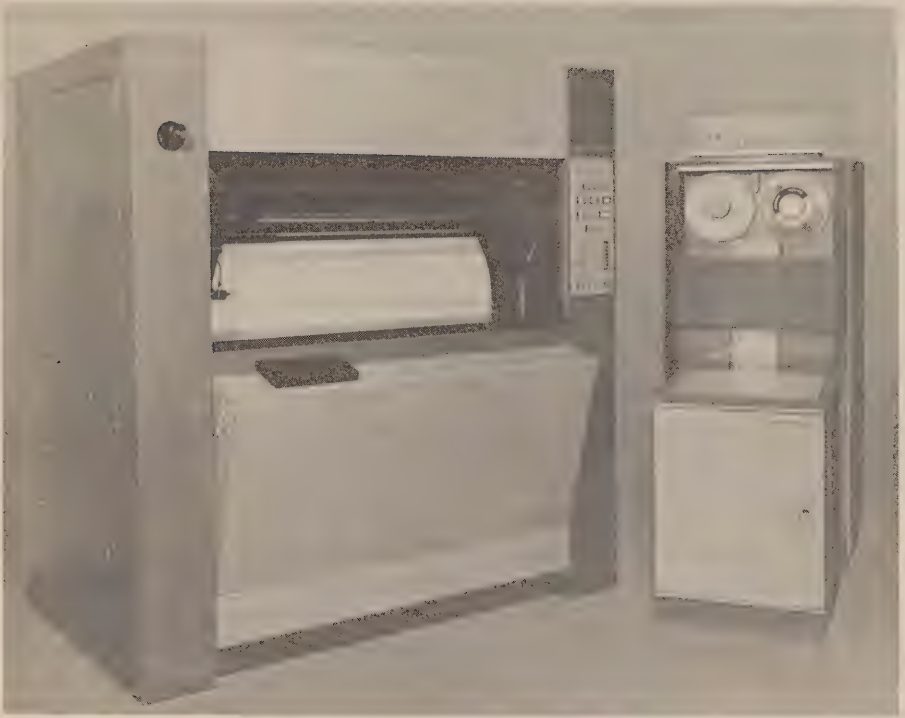
An improvement in the process for producing oxalate coatings on steel may make this process economical. The coatings give good resistance to corrosion particularly from SO_2 containing atmospheres.

Several large groups of inventions were licensed such as the microwave drying inventions to Mega System Design Ltd., the TEA laser group to GenTec (1969) Ltd. near Quebec City and to Lumonics Research Ltd. in Ottawa, and the agglomeration process inventions to Arcanum Corporation. The laser cases resulted in the establishment of a new industry (including a new company - Lumonics) which is now operating on a small scale and appears to have good prospects. Arcanum is also a new venture which has been established in the U.S. to develop and license the large and diverse group of agglomeration inventions. It is expected that this will be very helpful in establishing these processes in U.S. industry.

The antibiotic Myxin which showed great promise a few years ago but which was found later to be too toxic has now been licensed for more limited applications and may yet prove to be of considerable importance.

An imaginative proposal for application of the perforated breakwater principle to produce an oil storage island for use in the North Sea is under serious consideration by one of the large oil companies. If this project goes ahead it could lead to others of the same type. A breakwater is under construction in France. This is the first use of the invention outside of Canada and may open up the European market.

An airbath system which was developed to provide clean room working conditions at individual work benches is now



Data Corporation's new digital graphic generator prints data and full colour images, eg maps, at high speed using ink on ordinary paper. NRC and our licensee, Mega System Design Limited, jointly developed the microwave ink line dryer that is an essential part of the machine.

La nouvelle traceuse à commande numérique de la Data Corp. reproduit à grande vitesse des données et des images, comme les cartes, à l'encre, en couleur, sur papier ordinaire. Le CNRC et notre licenciée, la Mega System Design Limited, ont collaboré à la mise au point du sécheur d'encre, à micro-ondes, élément essentiel de l'appareil.

being developed for use in hospitals. One application prevents entry of airborne bacteria into working areas such as operating tables while a second application prevents egress of bacteria from a patient area to provide isolation for individual beds.

Several of the recent licenses have potential for large markets though these may not be fully developed for at least five years.

Although we have resolved an infringement problem which has persisted for over two years by obtaining an agreement from a company to procure its requirements from one of our licensees, as does its U.S. parent company, other companies, in both Canada and the United States, are now marketing similar devices, several of which may be infringements of our patents. We are endeavouring to establish conclusively whether these devices are infringements and plan to take steps, if necessary, to protect our patents.

We are also endeavouring to resolve another infringement problem of a quite different nature. In this instance the U.S. subsidiary of one of our Canadian licensees is marketing in the U.S. a device which is produced in Canada. In an action in the District Court in New York City, the subsidiary has been sued for infringement of a patent owned by a U. S. company. Since it would appear that the litigation is going to be prolonged and expensive, we are assisting our licensee and its subsidiary in every way possible in the defense of the action. The patent under which our licensee manufactures and sells the devices, however, has not been attacked and consequently we are somewhat limited in the action we can take.

Turning now to our Corporation's Financial Statement and the Report of the Auditor General for 1970-71, it will be noted in the Statement of Income and Expense that, as in each year since 1968, our expense exceeded our income.

It should be explained that, with the exception of 'Awards to Inventors', all of CPDL's other expenses are applied directly or indirectly to performing the acquisition, assessment, patenting and patent maintenance, development, promotion, licensing and administration of inventions. The money which CPDL expends on those inventions which survive the assess-

ments for patentability is a form of speculative "investment" in the expectation that enough will eventually be licensed and earn sufficient royalties to more than repay these "investment" costs. A broad but accurate generalization is that inventions do not begin to produce earned royalties until about two years after licensing. Thereafter earnings rise to a peak by the seventh or eighth year then begin to decline. It may be one or several years after CPDL has received and "invested" in an invention before a licensee can be found for it.

In 1965-66 CPDL's total expenses (not including "Awards to Inventors") were \$252,822. Bearing in mind that the great preponderance of CPDL's gross royalty earnings of \$481,272 in 1970-71 were from inventions received and "invested in" before about 1968 it can rightfully be claimed that CPDL's royalty earnings of \$481,272 in 1970-71 from CPDL's "investments" in inventions of \$252,822 in 1965-66 is a meaningfully representative illustration both in the ratio of return on the "investments" and of the time period required to realize them. It is not unreasonable to expect that CPDL's "investments" in inventions in the amount of \$545,850 in 1970-71 will yield a return of the same proportions as described above and that it will require until about 1976-77 to realize it.

As mentioned earlier in this Report CPDL has been receiving and processing a sharply increased flow of inventions for assessment in the last three years, and not only has this total grown but also the unit costs of handling them. CPDL's expenses on patent attorney's fees and other patent costs (including salaries and overhead for in-house work) have roughly doubled since 1968.

During the same period we have provided substantial financial assistance to our licensees to aid them in developing certain of our inventions and, provided that these inventions enjoy the commercial success we anticipate, we expect repayment of \$270,000 during the next five years or so for this assistance in addition to the regular royalties which these inventions will earn.

The relatively lower level of economic activity in Canada and the United States in 1970-71 produced substantially

lower sales, and hence lower royalty earnings, than either our licensees or we had expected; and despite the fact we were successful in holding down our net total expense to an increase of only 3% above those of the previous year the net loss for the year was over \$20,000 more than we had forecast.

We are hopeful that the general level of economic activity will improve in order to permit a more normal level of revenue to our Corporation in return for our expenditures on inventions made in the past five to ten years. We also believe that our expenditures in 1970-71 will, in due course, result not only in a satisfying return from CPDL's budgetary viewpoint but also, and more importantly, will bring a further substantial proportion of the inventions from publicly-financed and performed research into use for the public benefit because between twenty and twenty-five dollars of business, at the manufacturing level, is generated in the economy for every dollar that CPDL receives in royalties.

In accordance with the Financial Administration Act, our Corporation's operating budget for the 1971-72 fiscal year has been approved by the President of the Treasury Board.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS



AUDITOR GENERAL OF CANADA

Ottawa, 4 June 1971

The Honourable C.M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1971. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In compliance with the requirements of section 87 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

sgd A.M. Henderson

Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1971
(with comparative figures as at March 31, 1970)

	<u>Assets</u>	<u>1971</u>	<u>1970</u>
Current assets:			
Cash		\$ 11,373	\$ 1,151
Accounts receivable	\$ 55,688		74,299
Less: allowance for doubtful accounts	<u>400</u>		<u>-</u>
		55,288	<u>74,299</u>
Short-term investments and accrued interest		<u>174,858</u>	<u>89,613</u>
Total current assets		241,519	165,063
Investment in bonds of, or guaranteed by, Canada, at cost (market value, 1971, \$836,463; 1970, \$836,795)		848,619	917,308
Prepaid promotion expense		102,500	112,500
Experimental equipment on loan to licensees, under shared development program, at nominal value		<u>1</u>	<u>1</u>
		<u>\$ 1,192,639</u>	<u>\$ 1,194,872</u>

The accompanying notes are an integral part of the financial statements.

Approved on behalf of the Board:

sgd R.D. Hiscocks
.....
Director

sgd W.G. Schneider
.....
Director

	<u>Liabilities</u>	
	<u>1971</u>	<u>1970</u>
Current liabilities:		
Accounts payable	\$ 350,709	\$ 239,464
Royalties paid in advance	<u>2,500</u>	<u>1,385</u>
Total current liabilities	<u>353,209</u>	<u>240,849</u>
Equity of Canada:		
Capital Stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance at beginning of year	\$ 657,824	757,738
Add: Net adjustment of prior year's royalties	<u>-</u> 657,824	<u>14,830</u> 772,568
Deduct: Excess of expense over income for the year, per Statement of Income and Expense	<u>114,593</u>	<u>114,744</u>
Balance at end of year	<u>543,231</u>	<u>657,824</u>
	<u>839,430</u>	<u>954,023</u>
	<u>\$ 1,192,639</u>	<u>\$ 1,194,872</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of 4 June, 1971, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd A. M. Henderson
.....
Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED

Statement of Income and Expense for the year ended March 31, 1971
(with comparative figures for the year ended March 31, 1970)

	<u>1971</u>	<u>1970</u>
Income:		
Royalties, licensing fees, etc.	\$ 481,272	\$ 451,701
Less: Portion payable to third parties	<u>150,286</u>	<u>144,090</u>
	\$ 330,986	307,611
Interest earned	50,113	55,355
Service charges and commissions under agency agreements	26,892	45,044
Profit on sale of investments	19,629	(25)
Development assistance recovered	<u>3,637</u>	<u>5,535</u>
	431,257	413,520
Expenses:		
Salaries (Note 1)	276,530	250,255
Patent attorneys' fees and other patenting costs	128,499	102,298
Rent	47,366	46,583
Development assistance	41,762	71,782
Promotion	17,188	20,318
Services provided by National Research Council of Canada	9,985	15,600
Travel	8,323	6,207
Office stationery, supplies, printing, equipment and furnishings	6,744	8,666
Communications	4,809	4,390
Legal expense	2,657	77
Miscellaneous	<u>1,987</u>	<u>2,088</u>
	<u>545,850</u>	<u>528,264</u>
Excess of Expense over Income	<u>\$ 114,593</u>	<u>\$ 114,744</u>

The accompanying notes are an integral part of the financial statements.

Notes to financial statements

1. Salaries

Salaries for 1971 include remuneration of directors as directors \$2,250 and remuneration of officers \$48,291. The Company has twelve directors and five officers. Two officers are also directors.

2. Potential income

Not reflected in the financial statements are royalties estimated at \$118,000, due under an agreement with a foreign licensee and in dispute because of differences between that licensee and a third party government using the invention. Negotiations are proceeding to effect settlement of this matter.

3. Contingent liability

A contingent liability of approximately \$34,500 exists with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.



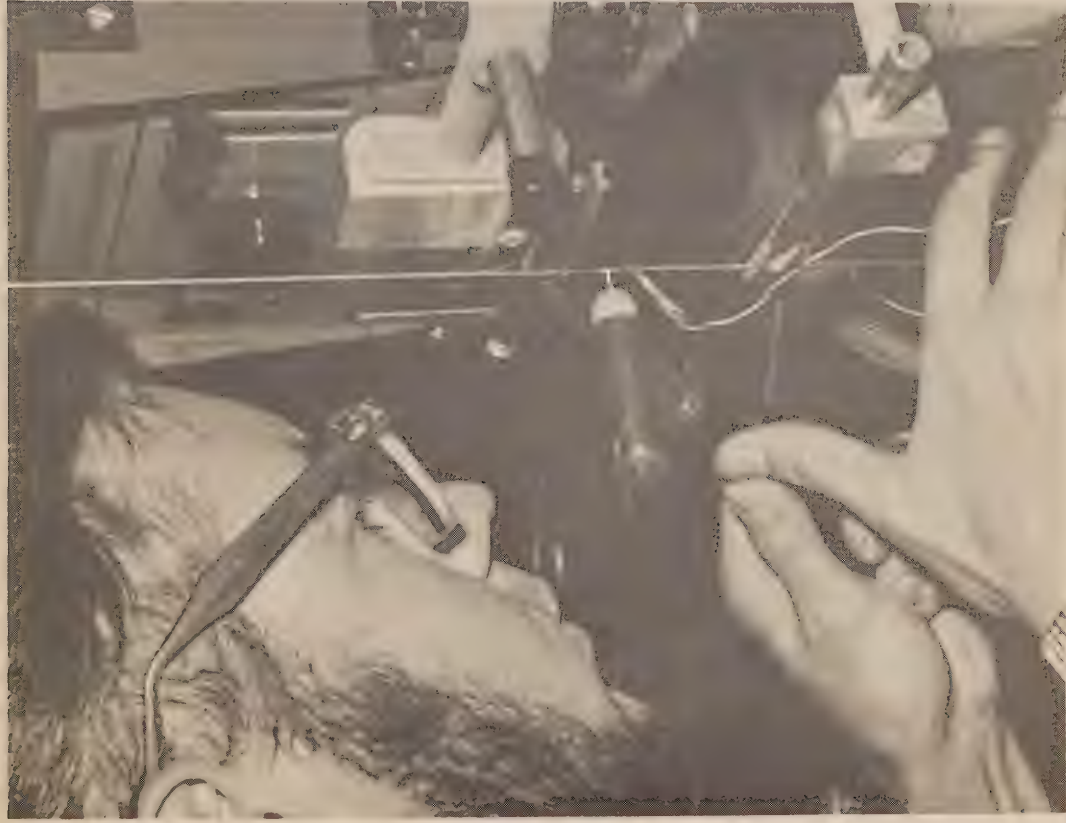
Bunker oil at Chedabucto Bay, N.S., being removed by early model of Oleovator.

Le pétrole dans la baie de Chedabucto, en Nouvelle-Ecosse, est retiré de la mer à l'aide d'un premier modèle de l'Oleovator.



Testing a prototype TEA Laser at Lumonics Research Limited, Ottawa.

Vérification du laser à excitation chez Lumonics Research Limited, Ottawa.



Measuring an aerial photograph with the monocomparator.

Monocomparateur permettant des mesures sur photographies aériennes.

Plasma-arc welding a neutron detector for use in a nuclear reactor.
Reuter Stokes Canada Limited

Soudure au plasmatron soudant un détecteur de neutrons utilisé dans les générateurs nucléaires. Reuter Stokes Canada Limited



1. Traitements

Les traitements de l'année 1971 comprennent la rémunération des administrateurs à ce titre \$2,250, et rémunération de fonctionnaires \$48,291. La Société a douze administrateurs et cinq fonctionnaires. Deux fonctionnaires sont également administrateurs.

2. Revenu conditionnel

Ne sont pas prises en comptes dans les états financiers des redevances estimées à \$118,000, dues en vertu d'une convention avec un concessionnaire étranger; ces redevances sont contestées en raison de différends entre le concessionnaire et un tiers gouvernement qui utilise l'invention. Le règlement de cette affaire est en voie de négociation.

3. Passif éventuel

Il existe un passif éventuel d'environ \$34,500 à l'égard d'impôts qui n'ont pas été déduits à la source sur les redevances versées par un concessionnaire étranger.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

État des revenus et dépenses pour l'année terminée le 31 mars 1971
 (Avec chiffres comparatifs pour l'année terminée le 31 mars 1970)

1971	1970	
		Revenus:
		Redevances, droits de concession
\$ 481,272	\$ 451,701	de brevets, etc.
		Moins: portion à payer à
150,286	144,090	des tiers
\$ 330,986	307,611	
		Intérêt gagné
50,113	55,355	Remboursements et commissions selon
		des conventions de mandataire
26,892	45,044	Profit sur vente de placements
19,629	(25)	Recouvrement de frais d'aide au
3,637	5,535	développement
431,257	413,520	
		Dépenses:
276,530	250,255	Traitements (Note1)
		Honoraires de procureurs de brevets
128,499	102,298	et autres frais de brevets
47,366	46,583	Loyer
41,762	71,782	Frais d'aide au développement
17,188		Frais de lancement
		Services fournis par le Conseil
9,985	15,600	national de recherches
8,323	6,207	Frais de voyage
		Papeterie, fournitures, impression
6,744	8,666	équipement et mobilier de bureau
4,809	4,390	Communications
2,657	77	Frais légaux
1,987	2,088	Divers
545,850	528,264	Exèdent des dépenses sur les revenus
\$ 114,593	\$ 114,744	

Les notes ci-jointes font partie intégrante des états financiers.

Passif

Exigibilités:			
Comptes à payer	\$	350,709	\$ 239,464
Redevances payées d'avance		2,500	1,385
Total du passif exigible		353,209	240,849

Avoir de l'Etat:

Capital-actions:

Autorisé - 10,000 actions sans

valeur nominale

Emis - 5,000 actions, entièrement

libérées

Eccédent:

Solde au début de l'année \$ 657,824

A ajouter: Rajustement net

de redevances de l'année

antérieure

657,824

114,593

A déduire: Excédent des
dépendances sur les revenus
pour l'année d'après l'état
des revenus et dépenses

114,744	543,231
657,824	839,430
954,023	\$ 1,192,639
1,194,872	

J'ai examiné le bilan ci-dessus et l'état des revenus et dépenses s'y
afférant et le 4 juin 1971, j'en ai fait rapport au Président du Comité des
recherches scientifiques et industrielles du Conseil privé.

L'Auditeur général du Canada,

signé A.M. Henderson

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITEE
(Constituée en vertu de la Loi sur les Corporations canadiennes)

Bilan au 31 mars 1971
(avec chiffres comparatifs au 31 mars 1970)

<u>Actif</u>		
Disponibilités:		
Encaisse	\$ 11,373	\$ 1,151
Comptes à recevoir	\$ 55,688	74,299
Moins: Provision pour mauvaise créances	<u>400</u>	<u>74,299</u>
Placements à court terme et intérêt couru	174,858	89,613
Total de l'actif disponible	<u>241,519</u>	<u>165,063</u>
Placement sur obligations émises ou garanties par le Canada, au prix coûtant, (valeur boursière, 1971 \$836,463; 1970, \$836,795)	848,619	917,308
Frais de lancement payés d'avance	102,500	122,500
Équipement expérimental prêt à des concessionnaires, en vertu du programme de développement à frais partagés, valeur nominale	1	1
	<u>\$ 1,192,639</u>	<u>\$ 1,194,872</u>

Les notes ci-jointes font partie intégrante des états financiers.

Approuvé au nom du Conseil d'administration:

Administrateur

signé R. D. Hiscocks

Administrateur

signé W. G. Schneider

Ottawa, le 4 juin 1971.

L'honorable C.M. Drury,
Président du Comité des recherches
scientifiques et industrielles du Conseil privé,
Ottawa.

Monsieur le Président,

J'ai examiné les comptes et les états financiers de la Société canadienne des brevets et d'exploitation limitée, pour l'année close le 31 mars 1971. Mon examen a comporté une revue générale des procédés comptables ainsi que les sondages des registres comptables et autres preuves à l'appui que j'ai jugés nécessaires dans les circonstances.

Conformément aux prescriptions de l'article 87 de la Loi sur l'administration financière, je déclare, qu'à mon avis:

- a) la Société a tenu des livres de comptabilité appropriés;
- b) les états financiers de la Société
 - i) ont été dressés sur une base comparable à celle de l'année précédente et sont en accord avec les livres de comptabilité,
 - ii) présentent, au bilan, un exposé juste et fidèle de la situation de la Société à la fin de l'année financière, et
 - iii) présentent, à l'état des revenus et dépenses, un exposé juste et fidèle des revenus et des dépenses de la Société pour l'année financière;

c) les opérations financières de la Société qui sont venues à ma connaissance étaient de la compétence de la Société en vertu de la Loi sur l'administration financière et toute autre loi pertinente.

Veuillez agréer, Monsieur le Président, l'expression de mes sentiments les meilleurs.

L'Auditeur général du Canada,
signé A.M. Henderson



RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

Au cours de la même période, nous avons accordé une aide financière substantielle à nos licenciés pour les aider à développer certaines de nos inventions et sous réserve que ces inventions aient le succès commercial que nous anticipons nous escomptons récupérer, en plus des redevances habituelles, \$270,000 sur cette aide au cours des cinq ou six prochaines années.

Par suite d'un ralentissement de l'activité économique au Canada et aux Etats-Unis en 1970-71, le niveau des ventes a quelque peu baissé et le montant des redevances perçues a été inférieur à celui prévu par nos licenciés ou par nous-mêmes. Par ailleurs, bien que nous soyons parvenus à limiter le total net de nos dépenses à une augmentation de 3% par rapport à l'année précédente, la perte nette pour l'année a été supérieure de \$20,000 à celle que nous avions prévue.

Nous espérons que la situation économique en général s'améliorera et permettra à notre Société de réaliser des recettes correspondant mieux aux investissements consacrés à des inventions faites au cours des cinq à dix dernières années. Nous croyons également que nos dépenses pour l'exercice 1970-71 auront non seulement un rendement satisfaisant du point de vue du budget de la SCBE mais également, et cela est plus important, qu'elles permettront de faire bénéficier le public d'un plus grand nombre d'inventions financées et développées avec les deniers publics car chaque dollar que la SCBE reçoit en redevance représente vingt à vingt-cinq dollars de chiffre d'affaires au stade de la production.

Conformément à la Loi sur l'Administration financière, le Président du Conseil du Trésor a approuvé le budget d'exploitation de notre Société pour l'exercice budgétaire 1971-72.

Nous devons préciser que, à l'exception des "Récompenses aux inventeurs", toutes les autres dépenses de la SCBE s'appliquent directement ou indirectement à l'acquisition, à l'évaluation à la délivrance et à la gestion des brevets ainsi qu'au développement, au lancement et à l'octroi de licences. Les fonds que la SCBE consacre aux inventions brevetables est une forme "d'investissement" spéculatif fondé sur la présomption qu'un nombre suffisant de celles-ci feront éventuellement l'objet de licences et rapporteront suffisamment de redevances pour couvrir largement ces "investissements". On estime généralement que les inventions ne commencent à produire des redevances qu'environ deux ans après l'accord d'une licence, après quoi un maximum est atteint vers la septième ou la huitième année. Il peut s'écouler d'une à plusieurs années avant que la SCBE trouve un licencié pour une invention dans laquelle elle a investi des fonds.

Au cours de l'exercice 1965-66, le total des dépenses de la SCBE ("Récompense aux inventeurs" non comprises) a atteint \$252,822. Si l'on tient compte du fait que la majeure partie des \$481,272 de redevances brutes perçues en 1970-71 par la SCBE provenait d'inventions reçues et "ayant fait l'objet d'investissements" avant 1968, on peut légitimement prétendre que ces \$481,272 provenant "d'investissements de la SCBE" dans des inventions d'une valeur totale de \$252,822 en 1965-66 constituent une illustration significative à la fois du rendement de ces "investissements" et du temps qu'il a fallu attendre pour en recueillir les fruits. Il n'est pas déraisonnable d'escamoter que les "investissements" que la SCBE a fait en 1970-71, dans des inventions représentant au total \$545,850, auront un rendement proportionnel à celui indiqué plus haut et qu'il faille attendre jusqu'en 1976-77 pour en recueillir le fruit.

Comme indiqué plus haut, la SCBE a, au cours de ces trois dernières années, reçu et pris en charge un nombre nettement accru d'inventions qui lui ont été soumises pour évaluation. Cet accroissement a également affecté les frais similaires de gestion. Les frais juridiques et autres frais afférents aux brevets supportés par la SCBE, y compris les salaires et les frais généraux pour les travaux exécutés par la Société elle-même, ont pratiquement doublé depuis 1968.

Un système de nettoyage de l'air mis au point pour assurer les conditions de propreté dites de "chambre propre", dans des milieux où les personnes travaillent individuellement, est maintenant développé pour servir dans les hôpitaux. Une application de ce système empêche les bactéries se trouvant dans l'air d'entrer dans les zones de travail comme les tables d'opérations et une autre application empêche les bactéries se trouvant dans le voisinage d'un malade d'atteindre d'autres lits.

Plusieurs des licences accordées récemment pourraient conduire à des ventes étendues; il se peut toutefois que ces marchés ne se développent pas entièrement avant cinq ans.

Quoi que nous ayons résolu un problème de contrefaçon vieux de deux ans en obtenant un accord d'une compagnie pour qu'elle s'approvisionne chez l'un de nos licenciés, comme sa compagnie-mère américaine, d'autres compagnies au Canada et aux Etats-Unis fabriquent maintenant et vendent des dispositifs semblables dont plusieurs pourraient bien être des contre-façons de nos brevets. Nous essayons d'établir conclusivement si ces dispositifs constituent des contrefaçons auquel cas nous avons l'intention d'entreprendre les démarches, si c'est nécessaire, pour protéger nos brevets.

Nous essayons également de résoudre un autre cas de contrefaçon mais d'une nature toute différente. Il s'agit de la filiale américaine de l'un de nos licenciés canadiens vendant aux Etats-Unis un dispositif fabriqué au Canada. Cette filiale a été attaquée à New York et condamnée pour contrefaçon d'un brevet américain propriété d'une compagnie américaine. Il semble que le procès se prolongera et sera coûteux et, de ce fait, nous aidons notre licencié et sa filiale de tous nos moyens pour faciliter leur défense. Le brevet selon lequel notre licencié fabrique et vend les dispositifs toutefois, n'a pas été attaqué et, en conséquence, nous sommes quelque peu limités dans notre action.

Si nous examinons maintenant le Rapport financier de notre Société et le procès-verbal y annexé de l'Auditeur général pour l'exercice 1970-71, nous remarquons que notre Etat des revenus et dépenses fait apparaître, comme chaque année depuis 1968, un excédant des dépenses sur les recettes.

Un groupe d'inventions pour traiter des minerais et liquides-liquides est en cours de développement. Il se peut que ces inventions aient des applications pour traiter les résidus et pour recycler les métaux.

Une amélioration du procédé de revêtement d'oxalate sur l'acier pourrait rendre ce processus économique. Les revêtements offrent une bonne résistance à la corrosion particulièrement dans les atmosphères contenant du SO_2 .

Plusieurs groupes importants d'inventions ont fait l'objet de licences comme celui des inventions sur le séchage par micro-ondes à la Mega System Design Limited, celui du laser à excitation transversale à GenTec (1969) Limited, près de Québec, et à Lumonics Research Limited, à Ottawa, et celui des procédés d'agglomération à la Arcanum Corporation. Dans le cas des lasers, il en est résulté la création d'une nouvelle industrie (dont une nouvelle compagnie, la Lumonics) qui maintenant fonctionne à petite échelle et semble avoir un avenir intéressant. La compagnie Arcanum est également nouvelle et elle a été établie aux Etats-Unis pour développer et licencier les différentes inventions se rapportant à l'agglomération. On s'attend à ce que l'industrie américaine adopte ces procédés grâce à l'aide apportée par cette compagnie.

Le Myxin, cet antibiotique qui semblait très prometteur il y a quelques années mais que l'on a trouvé toxique plus tard, a maintenant fait l'objet d'une licence pour des applications plus limitées et il se peut qu'il se révèle encore d'une importance considérable.

Une proposition pleine d'imagination pour appliquer le principe du brise-lames perforé à la construction d'un dépôt de pétrole sous forme d'île dans la mer du Nord est actuellement considérée sérieusement par l'une des grandes compagnies pétrolières. Si ce projet aboutit, il se pourrait qu'il conduise à d'autres du même type. Un brise-lames est actuellement en construction en France et c'est la première utilisation de l'invention hors du Canada, ce qui pourrait conduire à des ouvertures sur le marché européen.

Ils ont une licence et \$5,762 ont été consacrés à l'amélioration des inventions c'est-à-dire au développement préliminaire de façon qu'elles soient plus intéressantes pour les éventuels licenciés. La diminution, par rapport aux années précédentes, de l'aide financière en faveur des licenciés reflète le fait que nos licenciés utilisent de plus en plus le programme PATI dans sa forme révisée de février 1970. Toutefois, cette année, il a fallu que la SCBE continue d'aider les licenciés dans des circonstances où cette aide individuelle nécessitait des réponses rapides et était de l'ordre de \$35,000 ou moins. La réussite de la SCBE à licencier plus du double du nombre d'inventions de n'importe laquelle des années précédentes, tout en ne dépendant qu'une faible somme de développement préliminaire, est inhabituelle. Cependant, d'avoir réussi à licencier un groupe de neuf inventions peut avoir son origine dans le fait que nous avons développé beaucoup au cours de plusieurs années pour leur développement préliminaire.

Le développement de l'instrument de suture vasculaire, dispositif qui, nous l'expérons, donnera de grands bénéfices aux chirurgiens et à leurs malades, devrait être terminé comme nous l'avons précisé dans notre rapport de 1970. Toutefois, notre licencié insistant sur une sécurité de fonctionnement de 100% dont nous sommes très près, il est nécessaire d'apporter quelques modifications. La cause de la défaillance occasionnelle d'une agrafe a été identifiée avec précision et nous espérons de nouveau que cet instrument vraiment intéressant sera en production en séries en 1971-72.

Parmi les demandes de brevets les plus intéressantes, cette année, se trouve un nouveau procédé de traitement des lignites qui permettrait d'utiliser ce matériau dont les réserves sont considérables, dans les centrales thermiques. Une demande inhabituelle se rapporte à un procédé permettant de transformer le bois en nourriture pour les ru-

mnants. Un développement nouveau dans le domaine du séchage par micro-ondes permet de transmettre rapidement des cartes et autres documents en couleur.

subventionnées à même des deniers publics et ne disposant pas des installations ou des fonds nécessaires à la poursuite de leurs travaux jusqu'au stade ultime, c'est-à-dire jusqu'à ce que l'emploi du dispositif, du procédé ou de la substance puisse être généralisé. Avant de lancer une invention sur le marché notre Société doit donc généralement déterminer la nature et l'importance des perfectionnements qu'il faudra lui apporter avant d'en entreprendre la fabrication. Dans nombre de cas, le bénéficiaire de la licence acceptera ou pourra être persuadé d'accepter qu'une clause, garantissant qu'il apportera à l'invention les développements techniques jugés indispensables, soit incluse dans le contrat. La SCBE a prévu, dans ce cas, de le dédommager soit en lui en cédant les droits exclusifs pendant une période appropriée, soit en réduisant les redevances qu'il devra verser ou encore par une combinaison de ces dispositions ou autres accords similaires. Conformément à sa mission qui est de faire en sorte que "le public bénéficie davantage des inventions, par le canal de l'industrie", notre Société pourra être amenée, en d'autres occasions à prendre en charge les frais d'une certaine partie du développement technique, ou elle conclura un accord avec le bénéficiaire pour le partage des frais de mise au point d'un ou plusieurs prototypes ou d'une installation pilote destinés à la fabrication d'échantillons ou à l'essai ou à la démonstration de l'invention dans les conditions normales d'emploi ou de fabrication.

La Société a de nouveau participé à l'Exposition de la technologie alimentaire cette année à Windsor. Notre stand a reçu beaucoup de visiteurs et bien des contacts utiles ont été établis avec le milieu industriel. L'Exposition canadienne des équipements et de la chimie, qui a eu lieu à Toronto en septembre a été également une réussite. La nouvelle Exposition "Design Engineering" qui avait été prévue pour octobre a été repoussée en 1971 en raison des mauvaises conditions dans le monde des affaires. Notre programme de 1971 s'en trouvera chargé puisque nous prévoyons de participer à quatre expositions mais il pourra être exécuté.

Au cours de l'année 1970-71, la SCBE a affecté \$41,762 au développement de ses inventions, soit une diminution de \$30,020 par rapport à l'année 1969-70 dont le total était de \$71,782. En 1970-71, \$36,000 ont été consacrés à l'aide financière des licenciés développant les inventions pour lesquelles

On doit savoir également que le Ministère de la Défense nationale se charge de faire breveter toutes inventions émanant de ses Services. Le lancement, l'exploitation et l'octroi de licences pour les inventions qui, de l'avis du Ministère de la Défense sont susceptibles d'être exploitées commercialement, sont confiés à la SCBE qui paie les frais d'octroi du brevet et les frais de renouvellement dans tous les pays autres que ceux où le brevet touche au domaine militaire.

Dans la plupart des pays, la durée de validité d'un brevet est d'environ 17 ans et le nombre des premiers brevets détenus par la SCBE dont la validité arrive à expiration s'accroît rapidement. Parfois aussi, les anciens brevets ont été remplacés par de nouvelles inventions et n'ont plus de valeur commerciale.

Notre direction du développement et de la promotion est libre de commencer à intéresser les licenciés dès la première demande de brevet. Durant l'année dernière, 79 inventions se sont trouvées prêtes pour faire l'objet de licences; à noter que ceci représente une augmentation de 10 par rapport à l'année précédente qui elle-même comportait une invention de plus qu'en 1968-69. Au cours de l'année 1968, des inventions ont fait l'objet de licences accordées à des industriels pour un total de licences supérieur de 41 à celui de l'année précédente. Cette augmentation anormale est due à des circonstances fortuites et à l'effort de notre personnel. Au cours des quatre dernières années la SCBE a réussi à accorder des licences pour près de 45% des inventions qui se trouvaient à relever de son ressort pendant la même période. Au 31 mars 1971, la SCBE avait accordé des licences pour 261 inventions à 144 compagnies.

Les inventions à rayer des listes du fait qu'elles ont fait l'objet de licences, ou qu'elles sont arrivées à terme, ou qu'elles ont été dépassées, s'élèvent à 84 alors qu'elles n'étaient que de 48 en 1969-70; il ne reste donc sur nos listes que 750 inventions pouvant faire l'objet de licences alors que nous en avions 776 il y a un an.

Quant aux réalisations de l'année dernière dans les domaines du développement technique, du lancement et de l'octroi de licences d'exploitation des inventions, il serait bon de préciser, tout d'abord, que la majeure partie des inventions qui nous sont soumises viennent d'établissements de recherches

Nous avons le plaisir de mentionner ici que la Eastman Kodak Company (U.S.A.) a eu la bonté d'offrir à notre Société, -et plus tard de lui attribuer sans dédommagements financiers-, ses droits dans six brevets canadiens délivrés en 1970 et concernant un système à rein artificiel pour être utilisé à domicile et sur lequel la compagnie Eastman Kodak a beaucoup travaillé au cours d'une période de près de trois ans. Nous avons beaucoup cherché un licencié qui serait intéressé à pousser le développement de ce système pour en faire un appareil efficace et bon marché capable de satisfaire les grands besoins des malades de disposer d'un appareil facile à utiliser chez eux.

Au cours de l'exercice, la SCBE a déposé des demandes de brevets préliminaires pour 57 inventions différentes, comparativement à 74 en 1969-70 et à une moyenne annuelle de 67 au cours des quatre années précédentes. Parmi les 57 premières demandes déposées l'année dernière 35 le furent par le Service des brevets de la SCBE et les suivantes furent réparties entre diverses agences de brevet canadiennes. En outre, la SCBE a déposé 244 demandes dans d'autres pays, comparativement à 176 l'année précédente et a poursuivi des démarches pour environ 400 autres demandes déposées précédemment. La SCBE a jusqu'à ce jour déposé des demandes de brevets dans 61 pays différents.

Le 31 mars 1971, notre Service des brevets avait obtenu soit directement, soit par l'intermédiaire d'agents de brevet, la délivrance de brevet pour 968 différentes inventions.

Il nous faut préciser que la SCBE se charge de faire breveter la plupart des inventions émanant de l'EACL mais que cette dernière assume les frais de l'opération et qu'elle conserve le droits d'exploitation des brevets. Au moment où la SCBE dépose les demandes de brevet, notre Service d'exploitation et de lancement étudie l'invention pour déterminer si elle pourrait être exploitée commercialement. Au cours de l'exercice budgétaire qui vient de s'écouler, la SCBE a entrepris l'exploitation commerciale de deux inventions de l'EACL, sur un total de 14 qui avaient été proposées. Les autres inventions ressortissaient directement de la technologie des réacteurs nucléaires et sont exploitées par l'EACL.

Il a été mentionné plus haut que la SCBE a reçu l'an dernier 249 demandes d'évaluation de brevets d'inventions. Sur ce total, 55 (42 en 1969-70) provenaient du Conseil national de recherches du Canada; 10 (27 en 1969-70) du Ministère de la Défense nationale; 20 (16) de l'Énergie atomique du Canada limitée; 21 (16) du Ministère de l'Énergie, des mines et des ressources; 18 (14) du Ministère des pêcheries et des forêts; 0 (8) du Ministère de la santé nationale et du bien-être social; 5 (4) du Ministère de l'Agriculture et 10 de cinq autres ministères fédéraux, soit un total de 139 inventions émanant du secteur fédéral; 96 (59 en 1969-70) d'universités; aucune (nulle en 1969-70) de sociétés appartenant au gouvernement fédéral; 6 (4) d'instituts de recherches provinciaux et 8 d'autres sources. Un des phénomènes marquants relevés dans ce secteur a été le nombre relativement constant d'inventions communiquées au cours des quatre dernières années par la plupart des ministères et organismes fédéraux d'une part, et d'autre part, l'augmentation soutenue au cours des trois années passées de celles émanant des universités. Parmi l'ensemble des universités ayant déposé des demandes d'évaluation en 1970-71, une en déposa 14, une autre 13 et deux autres 10. Neuf universités en déposèrent quatre ou plus et huit autres en déposèrent jusqu'à trois chacune. Des communications nous parvinrent d'un total de dix-sept universités et collèges, comparativement à 17 l'année précédente et à 15 en 1968-69.

Quarante pour cent des demandes d'évaluation de brevets qui nous furent adressées concernaient divers types d'instruments (dont la moitié devait servir à effectuer des mesures et des essais quelconques), vingt pour cent exécutaient des opérations telles que triage, malaxage, formage, usinage d'outils, apprêt de divers matériaux, transport, maintenance, etc. dix pour cent étaient consacrées à l'électricité/électronique, à la chimie/métallurgie et à la mécanique. Les dix pour cent restant se répartissaient entre les secteurs essentiels suivants: pharmacutique, alimentaire, agricole, etc.; textile, papeterie et construction. Ces pourcentages ont relativement peu varié au cours de ces dernières années. Les inventions qui ont reçu une très grande publicité de la part de l'industrie et pour lesquelles celle-ci a manifesté un intérêt exceptionnel l'année dernière provenaient de l'Établissement du Conseil de recherches pour la défense, à Valcartier. Elles touchent d'importants progrès dans le domaine des lasers à gas.

remettant une réplique stylisée en argent du penseur Rodin, symbole officiel de notre Société. La remise de cet insigne était accompagnée d'un certificat officiel autorisant son port par l'inventeur dont l'invention avait pu être brevetée et faisait l'objet d'une proposition de licence. Depuis que ce programme a été commencé en 1969, nous avons accordé 490 insignes et certificats. Nous continuons de recevoir de nombreuses lettres de récipiendaires enchantés de recevoir cette distinction. Nous pensons que ce programme servira non seulement à fournir aux inventeurs un témoignage supplémentaire de reconnaissance bien mérité mais qu'il les encouragera également à nous faire part de leurs découvertes.

Au 31 mars 1971, la SCBE avait reçu de l'ensemble des organismes avec lesquels elle a passé des accords, un total de 2,908 demandes d'évaluation de brevets d'inventions dont 249 lui étaient parvenues au cours de l'exercice budgétaire 1970-71; soit 43 de plus qu'en 1969-70. Cette augmentation est de près de 4% supérieure à l'augmentation annuelle moyenne de 9% au cours des cinq dernières années. Chacune de ces demandes d'évaluation nécessite une étude et des recherches poussées avant que l'on puisse prendre une décision quant à l'opportunité de déposer une demande de brevet et, le cas échéant, choisir le pays où la demande devrait être déposée en premier lieu. Il faudra éventuellement, par la suite, choisir les pays dans lesquels il y aurait avantage à déposer une demande de brevet pour chaque invention. Un peu plus tard, il s'agira de déterminer s'il est avantageux de continuer à payer les frais annuels de renouvellement du brevet de chaque invention dans chaque pays. Il se peut également que l'on doive décider ultérieurement s'il vaudrait la peine d'encourir des frais de poursuites pour faire valoir ou faire respecter les droits d'un brevet dans un pays déterminé.

Nous avons reçu des suggestions de différentes origines durant les années 1969-70, pour que nous étudions s'il est possible de mettre sur pied et d'appliquer un accord permettant de faire des essais biologiques centralisés sur de nouveaux composés au Canada et, grâce à des recherches subventionnées par l'Etat, de les breveter et d'offrir à l'industrie canadienne, en priorité, la possibilité d'acquiescer une licence pour les produits intéressants. Au cours de l'année, nous avons pu nous procurer beaucoup de renseignements complémentaires qui devraient être précieux pour prendre une décision sur cette question.

En 1952, la Société conclut avec le National Research Development Corporation du Royaume-Uni une entente en vertu de laquelle chacune des deux parties, en retour d'un certain pourcentage de toute redevance reçue, s'occuperait de lancement de certaines inventions appartenant à l'autre. Des accords similaires ont depuis lors été passés avec des organismes homologues, en Inde et en Afrique du Sud.

La promulgation en 1954, par le Gouvernement fédéral, de la Loi régissant les inventions des fonctionnaires et qui stipulait entre autres que les ministres étaient habilités à céder à notre Société les droits que l'Etat détenait sur les inventions de son personnel, ouvrit la voie qui devait amener la SCBE à devenir le principal organisme chargé du brevetage et de la vente des licences d'exploitation des inventions pour le compte du Gouvernement canadien.

La SCBE est maintenant en mesure de s'occuper des inventions provenant de tous les ministères et organismes publics canadiens. Elle a en effet reçu à ce jour des inventions émanant de 29 ministères et organismes fédéraux sur un total de plus de cent. Elle a en outre conclu des ententes avec 23 universités et collèges canadiens, ainsi qu'avec 14 organismes provinciaux ou autres, subventionnés en totalité ou en partie par les fonds publics.

Nos accords avec toutes les universités contiennent les mêmes clauses et les mêmes conditions. Cependant, les dates de leur prise d'effet s'étendent sur plusieurs années et, de ce fait, il en est de même pour leur date d'expiration. Ainsi, nos accords avec 11 universités devaient se terminer le 31 mars 1971. Il a été possible de les prolonger dans leur forme actuelle jusqu'au 31 mars 1972 et, d'ici là, on doit les passer en revue pour établir des clauses devant être incluses dans les formules standards d'accord qui doivent entrer en vigueur à compter du 1^{er} avril 1972.

Nous sommes loin d'être certains que les chercheurs canadiens ont pleinement conscience de l'importance, tant pour eux que pour l'économie canadienne, d'une communication préalable de leurs découvertes brevetables à l'organisme habilité. Au cours du dernier exercice, la SCBE a continué, dans ce sens, son programme d'encouragement des chercheurs en leur

En bref, les fonctions de la SCBE sont de rendre les produits licenciables mis au point grâce à des programmes de recherches financées par un organisme public et réalisées dans un organisme public ou dans un établissement privé.

La SCBE a été créée en 1947 par le Conseil national de recherches du Canada (CNRC), et elle s'est vue confier la tâche d'obtenir des brevets d'invention et de vendre des licences d'exploitation pour les inventions résultant, pour la plupart, de travaux de recherches menés dans les laboratoires du CNRC pendant la Deuxième guerre mondiale. A cette fin, la SCBE étudiait les inventions qui lui étaient soumises en vue de déterminer s'il y avait matière à brevet, déposait dans divers pays des demandes de brevet pour les inventions jugées brevetables, mettait au point certaines inventions, seule ou avec l'aide d'autres organismes, afin d'en faire ressortir l'utilité ou de les rendre plus alléchantes pour les licences éventuelles, lançait les inventions et vendait des licences d'exploitation à l'industrie, percevait les redevances qui en découlaient et se servait de ces sommes pour verser une rétribution aux inventeurs, couvrir ses frais d'exploitation et pour apporter des perfectionnements ultérieurs aux inventions.

En 1948, il fut décidé que la Loi régissant l'exploitation des sociétés d'Etat s'appliquerait dorénavant à la SCBE, et, cette même année, la Société acceptait de se charger des inventions provenant d'organismes publics autres que le Conseil. Le premier ministre à faire appel à la Société fut celui de la Restauration économique et de l'Approvisionnement. Au cours de la même année, la SCBE prit des mesures, à la demande des universités dans chaque cas, pour conclure avec ces dernières des ententes en vertu desquelles la SCBE s'occuperait de leurs découvertes brevetables ou pouvant fournir matière à brevet.

En 1951, la SCBE conclut sa première entente avec un organisme provincial de recherches. Cet accord chargeait la Société de l'obtention des brevets, du développement technique et du lancement de ses inventions ainsi que de la vente des licences d'exploitation à l'industrie.

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A. A. Thomson

F. W. Lemon

R. G. Bitner

W. D. Gordon, Chef

Administration

L. Lipke, Chef

Comptabilité

H. A. Scharf

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Auditeur général du Canada

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CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 16 juin 1971.

L'honorable C. M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

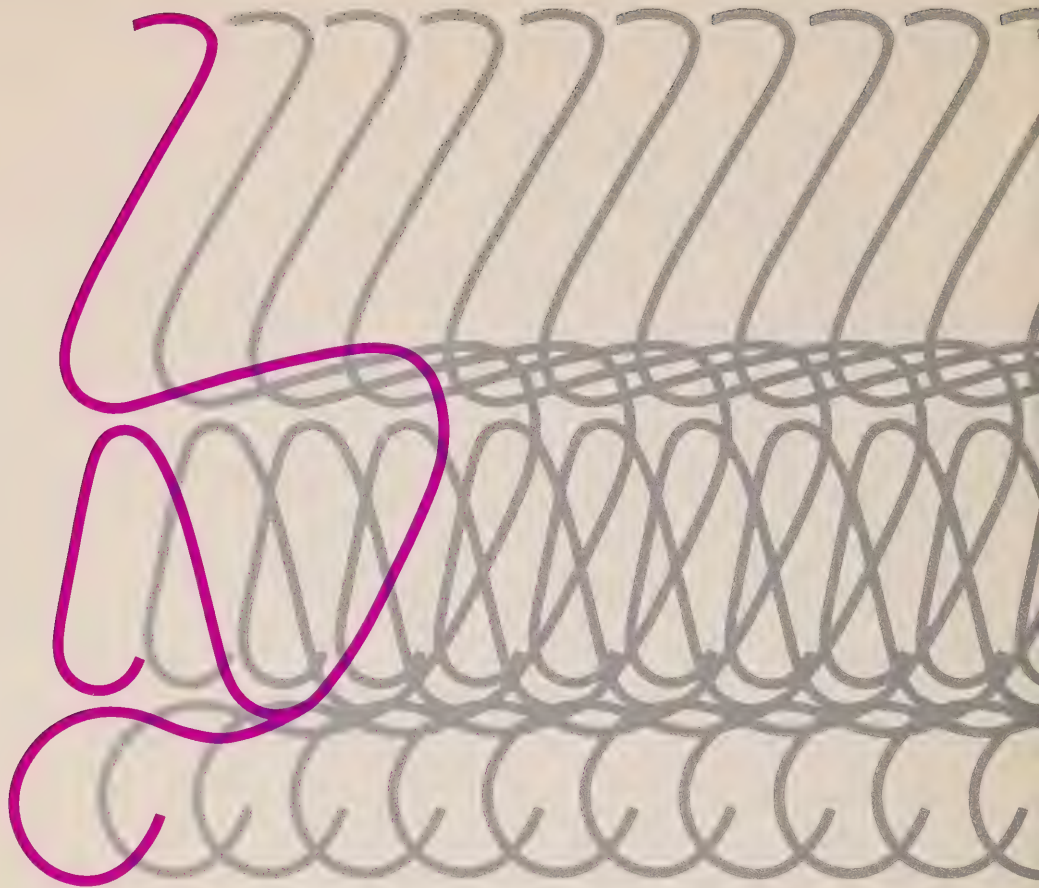
Monsieur le Ministre,

Conformément à l'article 85(3) de la Loi sur l'administration financière, j'ai l'honneur de vous présenter, au nom du Conseil d'administration, le Rapport annuel de la Société canadienne des brevets et d'exploitation, limitée, pour l'exercice qui s'est terminé le 31 mars 1971, de même que l'état des finances et le rapport de l'Auditeur général du Canada.

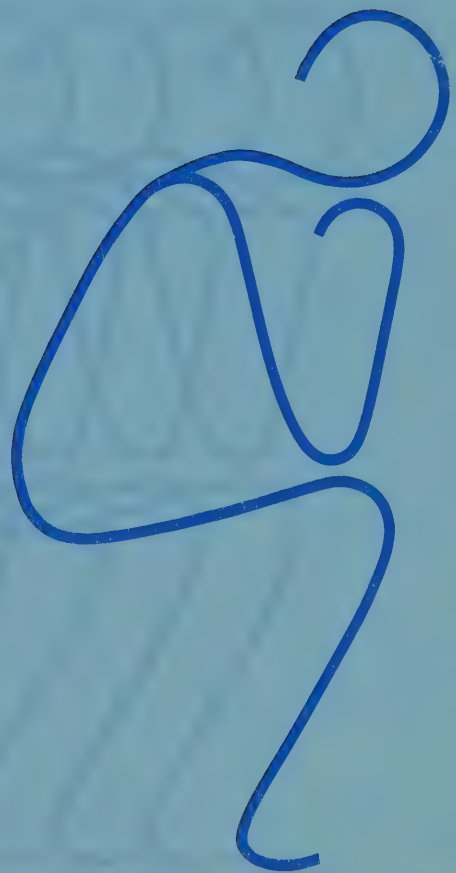
R. D. Hiscocks,
Président.

SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE
(S C B E)

RAPPORT ANNUEL
1971



CAI PD
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ANNUAL REPORT
1972

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 21 June 1972

The Honourable C.M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Sir,

In accordance with Section 75(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1971-72. The Company's Financial Statement and the Report of the Auditor General are included.

In your capacity of President of the Treasury Board you have approved our Corporation's operating budget for the 1972-73 fiscal year.

Yours faithfully,

R. D. Hiscocks,
President.

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(Resigned effective 7 December 1971)

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J.F. Leman
Department of Justice

AUDITOR

The Auditor General of Canada

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The Canadian Imperial Bank of
Commerce

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OBJECT

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the licensable products of publicly-financed research or development.

SPAN OF ACTIVITIES

CPDL assesses for patentability and commercial or other potential benefit to the public the disclosures of inventions from its various sources, makes filings for patents in the patent offices of various countries on those inventions which are deemed to qualify, develops alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential licensees, promotes and licenses inventions to industry, collects royalties therefrom and from these defrays the costs of its operations; and uses its funds to assist in the furtherance of its Object.

SOURCES OF INVENTIONS

Federal Departments and Agencies

CPDL was brought into being in 1947 by the National Research Council of Canada (NRC) prompted by the great accumulation of possibly-patentable material which had built up during the Second World War mostly from NRC and other government-financed research. During 1948 CPDL began handling inventions from federal sources other than NRC, the first being the Department of Reconstruction and Supply. The passage of the Public Servants Inventions Act in 1954 had the effect of making CPDL the prime patenting and licensing agency for inventions belonging to the Canadian government.

There have been many changes in names of organizations in the federal government since 1948. Over the years CPDL has received inventions from a total of 33 different departments and agencies. Last year we received disclosures from inventors in 14 different federal organizations.

The powers granted under the Companies Act (now the Canada Corporations Act) enabled CPDL to offer its services and to enter into agreements for handling their inventions with organizations outside the federal government, such as mentioned below.

Universities

The first such Agreement was with the University of British Columbia in late 1948 and the second was with Ecole Polytechnique in early 1949. During the past year the terms of the standard form of Agreement with universities, which had remained unchanged since 1959, were reviewed in collaboration with the universities and a revised form, to be effective from 1 April 1972, was agreed on. As at 31 March 1972 we had Agreements with 25 universities and colleges; and several more were pending.

Provincial Research Organizations

In 1951 the Saskatchewan Research Council became the first provincial research organization to contract for CPDL's services. As at 31 March 1972 we had Agreements with seven provincial research organizations.

Other Organizations

We have Agreements with five additional organizations such as the National Cancer Institute of Canada and the Manitoba Sanatorium Board which are the recipients of public funds to aid in their research.

Additional Sources

During the year a number of federal departments and agencies began including clauses in certain of their research and development grants and contracts to universities and industry which will have the result of providing the first right of refusal

to CPDL for inventions arising therefrom. The purpose of these clauses is to stimulate and assist the recipients of the grants or contracts in identifying and protecting inventions arising therefrom, to forestall recipients from indefinitely failing to exploit such inventions adequately in the public interest or from giving them away free of charge to foreign-based companies; and to assist in the promotion (and certain types of development, if deemed necessary), licensing and license administration of such inventions as may seem to require and deserve such assistance. We have been working closely with these departments and agencies in devising mutually satisfactory procedures for the administration of such inventions.

DISCLOSURES, PATENTING, INVENTORS

Disclosures

A total of 216 disclosures, which the inventors and the parent organizations thought might be patentable, were received during the year. This compares with totals of 249, 206, 208, 172, 158, 134, 133, 146 and 113 in each of the successively previous years in this ten-year period and shows an average growth of about 10% per annum which has slowed to about 8% in the last five years.

Public servants provided 125 of last year's total compared with 139 in 1970-71. The university total was 79, down from 96 the year earlier but well above the 59 in 1969-70. Provincial research organizations provided 5, CPDL's licensees 5 and federal proprietary corporations 2 disclosures.

During the year there was considerable reorganization among several government departments which had the effect of creating new departments, reducing others and some names disappearing. Therefore it has not been possible to compare last year's disclosures with the previous year's in several instances. Of the 216 disclosures received in 1971-72, 39 (55 in 1970-71) originated with the National Research Council of Canada; 22 came from the Department of the Environment; 14 (20) were

from Atomic Energy of Canada Limited; 14 originated with the Department of Energy, Mines and Resources; 14 were supplied by the Department of National Defence; 4 (5) originated with the Department of Agriculture and 4 (0) came from the Department of National Health and Welfare. Disclosures were received from a total of 22 universities which was five more than any previous year. The highest number from any university was nine; and eleven universities made four or more disclosures.

Although the most frequent type of disclosure continued, as always, to be instruments of various types for measuring, testing, controlling, etc., there was a quite noticeable rise last year in the proportions which flowed from mechanical, chemical and metallurgical disciplines. The increase in the number of disclosures directed towards dealing with environmental problems has been quite marked.

Patenting

Last year CPDL filed first applications for patent on 60 different inventions. This compares with 57 in 1970-71 and an average of 65 per year over the previous five years. Of the 60 first filings made last year 44 were filed by CPDL's Patent Branch and the remainder were let out amongst various Canadian patent agent firms. In addition CPDL made 116 further applications in additional countries - compared with 301 the previous year - and continued the prosecutions on about 400 previously filed applications. Over the years CPDL has made applications for patents in 61 different countries.

As at 31 March 1972 our Patent Branch had directly or through patent agent firms accumulated issue of patent on 1187 different inventions.

Inventors

As for the past four years our Corporation last year continued to present lapel pins bearing replicas of our registered symbol "The Inventor" and formal certificates granting the right to wear to inventors on whose inventions we had been able to

obtain issue of patent and which we had promoted for licensing. Last year we made such presentations to 72 inventors. This brings our total of inventors thus recognized to five hundred and sixty-two.

Also last year our Corporation made recommendations to the Public Servants Inventions Committee for increase in scale of awards to public servant inventors above those now authorized by the Public Servants Inventions Act. We are hoping that such an increase will be approved and will lead to the making and disclosing of more and better inventions by public servants.

PROMOTION, DEVELOPMENT, LICENSING

Promotion of Inventions

We usually do not release a new invention to our Promotion and Development Branch for advertising, exhibiting, etc., until our Patent Branch has completed a first application for patent on it. This may be any time from a few weeks to a year or more after we have received it, and averages about nine months. (Issue of patent may take about another year to four years. The life of a patent in most countries is for seventeen years.) Most of our successes in licensing an invention occur within the first six years after we begin promoting it although a few may be as late as fifteen years or so. Each year we add to our inventory of inventions those newly released for promotion and delete all those which have expired, been superceded or otherwise are no longer licensable. Last year we added 52 new inventions and deleted 118, leaving a net total being actively promoted at 31 March 1972 of 685 compared with 751 a year earlier. The net reduction of 66 was in largest part because of the removal of 97 inventions on account of expiry or obsolescence, most of these having to do with the Canadian CF 100 fighter aircraft, the Orenda jet engine and related items. However, the total of 52 new inventions entering inventory was 27 less than a year ago. This was even further below the average figure of 68 of the past few years than last year's total of 79 was above it. Our experience over the years has taught us these wide swings in the short term need not be cause for alarm.

Among the most interesting of the new inventions is a group of fire retardant and preservation treatments for wood. These may have a far-reaching effect on the uses and markets for wood products.

A new type of marbleized chip board is stimulating much interest. The patterns are created in the board during manufacture and may be produced in a great variety of attractive colours and effects.

A new security system for currency, credit cards or documents is based on an optical interference coating on a plastic film. The coating gives colour shift patterns that are unique and are almost impossible to decipher and duplicate.

Among the several methods by which we promote our inventions for licensing the most pervasive is via our widely distributed Patents Handbook; and the most effective is by exhibiting them at large trade shows. During the year we completed a major reworking and production of the Handbook in a new design, format and the new title "Inventions Catalog" (see photograph) which has already earned many compliments. We exhibited at trade shows in Halifax, Ottawa and two in Toronto covering the chemical pollution, engineering design and electronics fields. As usual our displays drew special attention and we again made many valuable new contacts.

Development

As mentioned in our Report last year, our Corporation withdrew in 1970 from providing financial assistance to our licensees in their development of inventions. However, development work was completed very successfully last year on three of the inventions to which we had earlier supplied financial assistance and it seems highly probable that not only will our licensees profit substantially from our help but also the Canadian public and ourselves. Particular mention should be made of the Vascular Suturing Instrument which has been under development at the National Research Council and by three successive licensees for fifteen years and aided by our financial support for ten. Its purpose is rapidly to rejoin severed arteries, veins,



ureters and other vessels very quickly. The instrument and accompanying accessories which this development has now produced is superb and the likelihood is high that it will attain large use by surgeons throughout the world in the years ahead.

Licensing

Last year we were successful in licensing 32 inventions under 29 license agreements. This was far below our record-breaking 68 inventions licensed the previous year which several unique factors combined to make possible; but even so was five above the average of 27 for the five preceding years. At year's end we had licenses in force on a total of 258 inventions among 140 different companies.

Probably our most notable licensing last year was of a new design of a small and compact but powerful and versatile scanning electron microscope which had been developed at the Department of Communications laboratories and which we licensed on a design and know-how basis to a new company which was established for the purpose of manufacturing the microscope in Canada and selling it world-wide. Its prospects of winning a large share of the world market appear to be excellent.

As mentioned in our report last year, we licensed the TEA laser group of inventions by the Defence Research Board to two Canadian companies. One was established specifically to develop and exploit these inventions. It accomplished the feat of producing its first market item within nine months. Its current product is believed to produce the most powerful pulse of any laser now commercially available. Both companies are now in production with different types of products and development is continuing rapidly.

Also mentioned as having good prospects in our report last year, the oil storage "island" for use in the North Sea is under construction in Stavanger, Norway, and should be completed and towed into place in September 1972. The structure has been made practicable because of the National Research Council's perforated breakwater invention. The complete structure is about 300 feet high and 300 feet in diameter and will rest

on the North Sea bottom in 230 feet of water. The storage capacity is 1,000,000 barrels. Much larger installations in considerably deeper waters are being contemplated.

Many of the other inventions licensed in recent years are similarly beginning to enjoy heartening successes or steadily improving prospects.

FINANCIAL HIGHLIGHTS

Turning now to our Corporation's Financial Statement and the Report of the Auditor General for 1971-72, it will be noted in the Statement of Income and Expense that our expense exceeded our income by \$48,679 compared with a net deficit of \$114,593 in the previous year. Although our net royalty income increased last year by about \$28,000, the chief reason for the smaller net deficit was a reduction of about \$63,000 in our expenses of which about \$42,000 came from lessened assistance on our part to the development of our inventions in favour of referring our licensees to the Department of Industry, Trade and Commerce and to the NRC's Industrial Research Assistance Program. Another area of substantially lessened expense was in patent agents' fees for preparing and prosecuting applications for patents on our behalf. As mentioned earlier in this Report, this lessened expense resulted largely from doing more of the work in-house and in smaller part from less total patenting activity.

Previously in this Report we mentioned that several of the inventions which we licensed, and in some instances assisted in developing over the past several years, have now resulted in excellent products which have reached the production stage. On this account we are optimistic that our royalty income will soon start on a definite upturn.

Referring next to the Balance Sheet, we wish to direct your attention to the balance of \$790,751 (including \$296,199 as Equity of Canada) at the year's end. This balance includes men-

tion for the first time in our Balance Sheet of the value of our inventory of patents as an Asset at nominal value of One Dollar. Note 1 to the Balance Sheet relates the actual worth of our inventory of patents at year's end as being approximately \$900,000 if expressed in terms of the costs to our Corporation of procuring it. In our opinion the market value of our inventory at the end of 1971-72 was several times more than \$900,000.

We are pleased to believe that during the past year our Corporation again made substantial progress in our Object of assisting in bringing the licensable products of research which was supported by public funds into use for the public benefit.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS



AUDITOR GENERAL OF CANADA

Ottawa, 1 June 1972

The Honourable C.M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1972. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In compliance with the requirements of section 77 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

sgd A.M. Henderson

Auditor General of Canada.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1972
(with comparative figures as at March 31, 1971)

	<u>Assets</u>	
	<u>1972</u>	<u>1971</u>
Current assets:		
Cash including term deposits	\$ 95,866	\$ 11,373
Accounts receivable	45,742	55,288
Interest accrued on investments	10,503	14,225
Investments maturing within one year	<u>-</u>	<u>160,633</u>
Total current assets	152,111	241,519
Investments in bonds of, or guaranteed by, Canada, at costs (market value, 1972, \$738,125; 1971, \$836,463)	775,250	848,619
Prepaid promotion expense	92,500	102,500
Patent rights at nominal value (Note 1)	1	-
Experimental equipment on loan to licensees, under shared development program, at nominal value (Note 2)	1	1
	<u>\$ 1,019,863</u>	<u>\$ 1,192,639</u>

The accompanying notes are an integral part of the financial statements.

Approved on behalf of the Board:

sgd R.D. Hiscocks
.....
Director

sgd W.G. Schneider
.....
Director

	<u>Liabilities</u>	
	<u>1972</u>	<u>1971</u>
Current liabilities:		
Accounts payable	\$ 221,738	\$ 350,709
Royalties paid in advance	<u>7,374</u>	<u>2,500</u>
Total current liabilities	<u>229,112</u>	<u>353,209</u>
Equity of Canada:		
Capital Stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance at beginning of year	\$543,231	657,824
Deduct: Excess of expense over income for the year, per Statement of Income and Expense	<u>48,679</u>	<u>114,593</u>
Balance at end of year	<u>494,552</u>	<u>543,231</u>
	<u>790,751</u>	<u>839,430</u>
	<u>\$ 1,019,863</u>	<u>\$ 1,192,639</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 1, 1972, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd A.M. Henderson
.....
Auditor General of Canada

Statement of Income and Expense for the year ended March 31, 1972
(with comparative figures for the year ended March 31, 1971)

	<u>1972</u>	<u>1971</u>
Income:		
Royalties, licensing fees, etc.	\$ 519,258	\$ 481,272
Less: Portion payable to third parties	<u>160,478</u>	<u>150,286</u>
	\$ 358,780	330,986
Interest earned	50,516	50,113
Service charges and commissions under agency agreements	20,811	26,892
Profit on sale of investments	1,476	19,629
Development assistance recovered	<u>2,378</u>	<u>3,637</u>
	433,961	431,257
Expenses:		
Salaries (Note 3)	291,700	276,530
Patent agents' fees and other patenting costs	93,980	128,499
Rent	46,571	47,366
Development assistance	-	41,762
Promotion	19,278	17,188
Services provided by National Research Council of Canada	10,395	9,985
Travel	7,129	8,323
Office stationery, supplies, printing, equipment and furnishings	6,563	6,744
Communications	5,464	4,809
Legal expense	-	2,657
Miscellaneous	<u>1,560</u>	<u>1,987</u>
	<u>482,640</u>	<u>545,850</u>
Excess of Expense over Income	<u>\$ 48,679</u>	<u>\$ 114,593</u>

The accompanying notes are an integral part of the financial statements.

1. At March 31, 1972, the Corporation had expended approximately \$900,000 on unexpired patent rights for inventions. In accordance with Corporation practice, expenditures related to the acquisition and maintenance of patent rights are charged to expense as incurred; and income, if any, derived from these patent rights is recorded when received or reported by the licensee.
2. Experimental equipment on loan with an original cost value of \$173,513 has been charged to expense as incurred. Any proceeds from the disposal of this equipment will be recorded as income in the year received.
3. Salaries for 1972 include remuneration of directors as directors \$1,625 and remuneration of officers \$47,368. The Company has twelve directors and five officers. Two officers are also directors.
4. Not reflected in the financial statements are royalties estimated at \$118,000, extending over a period of years, due under an agreement with a foreign licensee and in dispute because of differences between that licensee and a third party government using the invention.
5. A contingent liability of approximately \$34,500 exists with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.



Oil storage island for Ekofisk under construction.

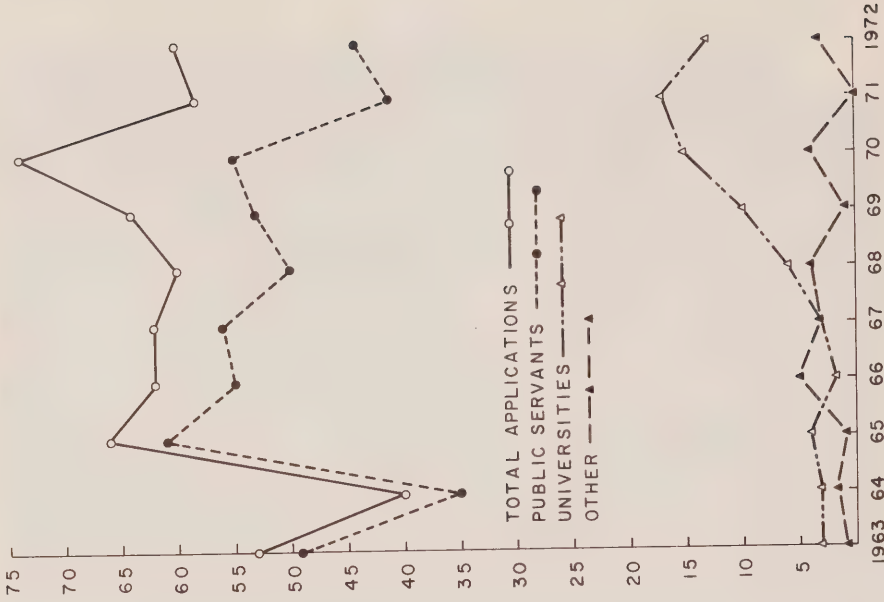
Dépôt de pétrole sous forme d'île pour Ekofisk en construction.



Prototype of miniature scanning electron microscope -
Semco Instruments Co. Ltd., Ottawa.

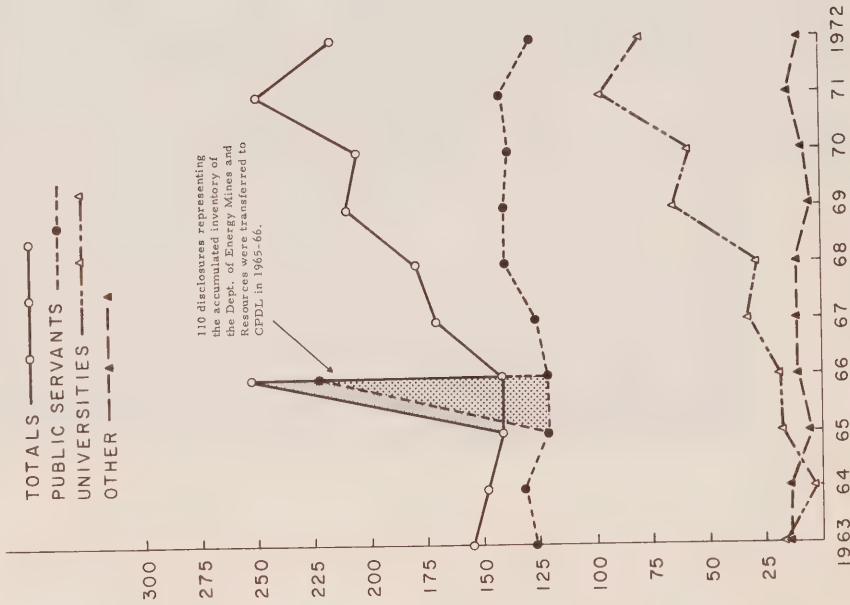
Prototype d'un microscope miniaturisé à balayage
électronique - Semco Instruments Co. Ltd., Ottawa

DISCLOSURES RESULTING IN APPLICATIONS FOR PATENTS



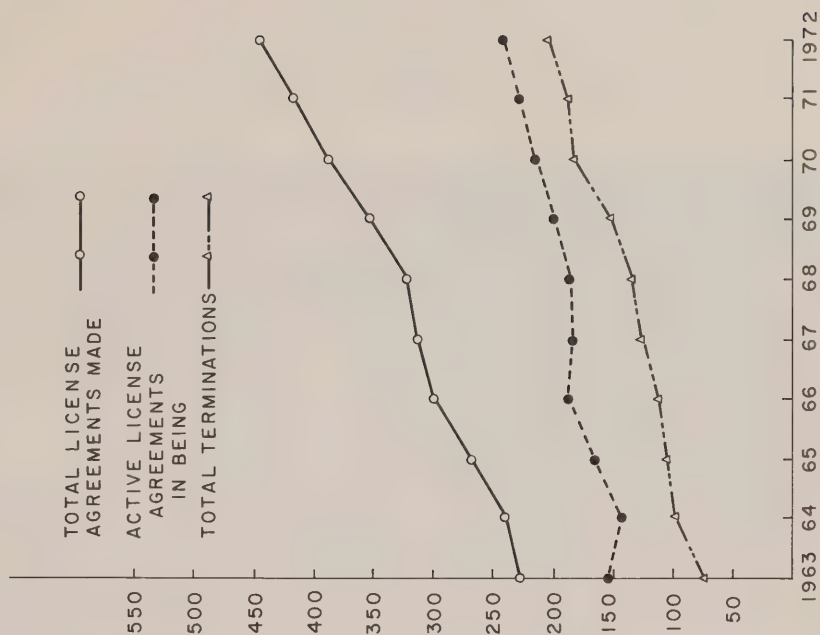
Note - Does not include filings for patents on inventions disclosed from the Dept. of National Defence. Such filings have already been made before disclosure.

DISCLOSURES OFFERED BY INVENTORS

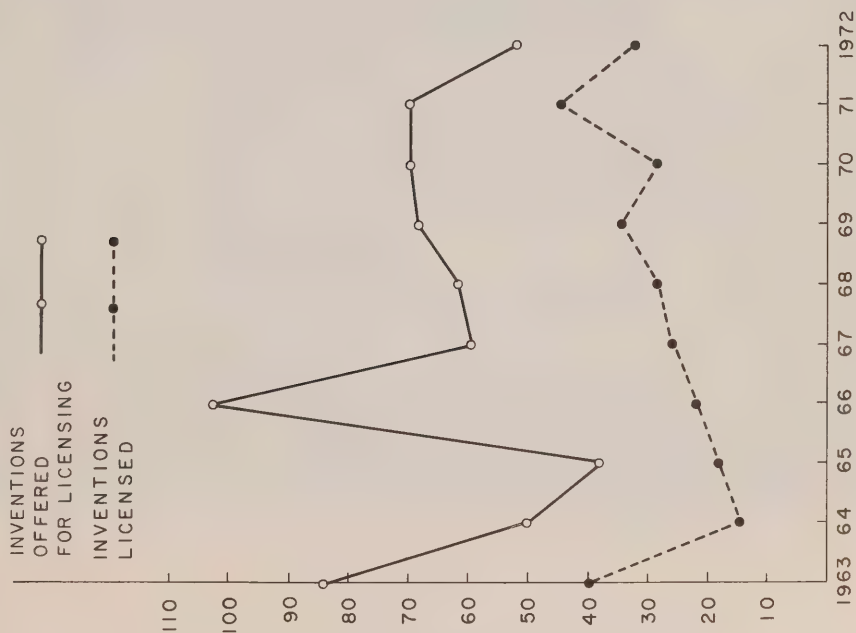


Note - Disclosures from Dept. of National Defence are assessed and patent applied for before forwarding to CPDL.

CUMULATIVE LICENSING TOTALS



PROMOTION AND LICENSING



Booth at a recent trade show.
Stand à une exposition récente.



Brochures of some licensees make an interesting display panel.

Ces brochures de quelques concessionnaires sont assurément intéressantes.



Notes aux états financiers

1. En date du 31 mars 1972, la Corporation dépendait environ \$900,000 sur des droits de brevets non expirés. Conformément à ces méthodes habituelles, les dépenses relatives à l'acquisition et au maintien des droits de brevets sont portées aux dépenses au fur et à mesure de leur engagement et le revenu éventuel des droits de brevets est enregistré, lorsque reçu ou déclaré par le concessionnaire.
2. L'emprunt de l'équipement expérimental au coût initial de \$173,513 a été porté aux dépenses encourues. Tout produit de la disposition de cet équipement sera enregistré comme revenu reçu dans l'année.
3. Les traitements de l'année 1972 comprennent la rémunération des administrateurs à ce titre \$1,625, et la rémunération de fonctionnaires \$47,368. La Société a douze administrateurs et cinq fonctionnaires. Deux fonctionnaires sont également administrateurs.
4. Ne sont pas prises en considération dans les états financiers des redevances estimées à \$118,000, se prolongeant sur une période d'années, dues en vertu d'une convention avec un concessionnaire étranger; ces redevances sont contestées en raison de différends entre le concessionnaire et un tiers gouvernement qui utilise l'invention.
5. Il existe un passif éventuel d'environ \$34,500 à l'égard d'impôts qui n'ont pas été déduits à la source sur les redevances versées par un concessionnaire étranger.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

État des revenus et dépenses pour l'année terminée le 31 mars 1972
(Avec chiffres comparatifs pour l'année terminée le 31 mars 1971)

		1972	1971
Revenus:			
Redevances, droits de concession	\$ 519,258		\$ 481,272
de brevets, etc.			
Moins: portion à payer à			
des tiers	160,478		150,286
		\$ 358,780	330,986
Intérêt gagné	50,516		50,113
Remboursements et commissions selon			
des conventions de mandataire	20,811		26,892
Profit sur vente de placements	1,476		19,629
Recouvrement de frais d'aide au			
développement	2,378		3,637
		433,961	431,257
Dépenses:			
Traitement (Note 3)	291,700		276,530
Honoraires des agents de brevets			
et autres frais de brevets	93,980		128,499
Loyer	46,571		47,366
Frais d'aide au développement	-		41,762
Frais de lancement	19,278		17,188
Services fournis par le Conseil	10,395		9,985
Frais de voyage	7,129		8,323
Papeterie, fournitures, impression	6,563		6,744
équipement et mobilier de bureau	5,464		4,809
Communications	-		2,657
Frais légaux	1,560		1,987
Divers		482,640	545,850
Exédent des dépenses sur les revenus	\$ 48,679		\$ 114,593

Les notes ci-jointes font partie intégrante des états financiers.

Passif

Exigibilités:					
Comptes à payer	\$	221,738	\$	350,709	
Redevances payées d'avance		7,374		2,500	
Total du passif exigible		<u>229,112</u>		<u>353,209</u>	
Avoir de l'Etat:					
Capital-actions:					
Autorisé - 10,000 actions sans					
valeur nominale					
Emis - 5,000 actions, entièrement					
libérées		296,199		296,199	
Excédent:					
Solde au début de l'année	\$543,231				
A déduire. Excédent des					
dépenses sur les revenus					
pour l'année d'après l'état					
des revenus et dépenses	<u>48,679</u>				
		494,552		543,231	
		<u>790,751</u>		<u>839,430</u>	
		\$ 1,019,863		\$ 1,192,639	

J'ai examiné le bilan ci-dessus et l'état des revenus et dépenses s'y
afférant et le 1 juin 1972, j'en ai fait rapport au Président du Comité des
recherches scientifiques et industrielles du Conseil privé.

L'Auditeur général du Canada,

signé A.M. Henderson

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITEE
(Constituée en vertu de la Loi sur les Corporations canadiennes)

Bilan au 31 mars 1972
(avec chiffres comparatifs au 31 mars 1971)

Actif		
Disponibilités:		
Encaisse inclû dépot à termes	\$ 95,866	\$ 11,373
Comptes à recevoir	45,742	55,288
Intérêt couru sur placements	10,503	14,225
Placements à court terme	-	160,633
Total de l'actif disponible	152,111	241,519
Placement sur obligations émises ou garanties par le Canada, au prix courant, (valeur boursière, 1972, \$738,125; 1971, \$836,463)	775,250	848,619
Frais de lancement payés d'avance	92,500	102,500
Les droits de brevets, valeur nominale (Note 1)	1	-
Équipement expérimental prêt à des concessionnaires, en vertu du programme de développement à frais partagés, valeur nominale (Note 2)	1	1
	\$ 1,019,863	\$ 1,192,639

Les notes ci-jointes font partie intégrante des états financiers.

Approuvé au nom du Conseil d'administration:

Administrateur

signé R. D. Hiscocks

Administrateur

signé W. G. Schneider



AUDITEUR GÉNÉRAL DU CANADA

Ottawa, le 1 juin 1972.

L'honorable C. M. Drury,

Président du Comité des recherches

scientifiques et industrielles du Conseil privé,

Ottawa.

Monsieur le Président,

J'ai examiné les comptes et les états financiers de la Société canadienne des brevets et d'exploitation limitée, pour l'année close le 31 mars 1972. Mon examen a comporté une revue générale des procédés comptables ainsi que les sondages des registres comptables et autres preuves à l'appui que j'ai jugés nécessaires dans les circonstances.

Conformément aux prescriptions de l'article 77 de la Loi sur l'administration financière, je déclare, qu'à mon avis:

a) la Société a tenu des livres de comptabilité appropriés;

b) les états financiers de la Société

i) ont été dressés sur une base comparable à celle de l'année précédente et sont en accord avec les livres de comptabilité,

ii) présentent, au bilan, un exposé juste et fidèle de la situation de la Société à la fin de l'année financière, et

iii) présentent, à l'état des revenus et dépenses, un exposé juste et fidèle des revenus et des dépenses de la Société pour l'année financière;

c) les opérations financières de la Société qui sont venues à ma connaissance étaient de la compétence de la Société en vertu de la Loi sur l'administration financière et toute autre loi pertinente.

Veuillez agréer, Monsieur le Président, l'expression de mes sentiments les meilleurs.

L'Auditeur général du Canada,
signé A. M. Henderson

RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

Nous avons plaisir à penser qu'au cours de l'année dernière, notre Société a fait des progrès appréciables dans le cadre de son objet en apportant son aide pour que des produits de recherche licenciables, résultant de travaux financés par les fonds publics, soient à la portée du public.

ASPECTS FINANCIERS

Si nous examinons maintenant le Rapport financier de notre Société et le procès-verbal de l'Auditeur général pour l'année 1971-72, on remarque que notre état des revenus et dépenses fait apparaître que nos dépenses ont dépassé nos recettes de 48,679 dollars tandis que, l'année précédente, le déficit net s'élevait à 114,593 dollars. Quoique nos revenus provenant de nos redevances nettes aient augmenté l'année dernière d'environ 28,000 dollars, la raison principale pour laquelle notre déficit net est plus petit se trouve dans le fait que nos dépenses ont été réduites d'environ 63,000 dollars; sur ces 63,000 dollars, 42,000 proviennent de l'économie réalisée en dirigeant nos licences sur le Ministère de l'Industrie et du Commerce et sur le Programme d'aide à la recherche industrielle (PARI) du CNRC. Nous avons également moins dépensé dans un autre domaine, c'est-à-dire dans celui des sommes allouées aux agents de brevets, pour préparer et suivre nos demandes de brevets. Comme nous l'avons déjà mentionné dans ce rapport nos dépenses ont été moindres du fait que nous avons fait plus de travail par nous-mêmes et que nous avons eu moins de demandes de brevets à établir et à suivre.

Nous avons également mentionné dans ce rapport que plusieurs inventions, dont nous avons cédé des licences et, dans certains cas, aidé au développement au cours des dernières années, ont maintenant donné des produits excellents qui sont au stade de la production. C'est la raison pour laquelle nous sommes optimistes et que nous pensons que le revenu provenant de nos redevances devrait bientôt augmenter.

Si nous passons maintenant au bilan, nous souhaitons attirer votre attention sur le solde de 790,751 dollars à la fin de l'année, y compris 296,199 dollars comme Avoir de l'Etat. Ce bilan comprend pour la première fois la valeur de notre inventaire de brevets considéré comme actif d'une valeur nominale de Un dollar. Dans la note I du bilan nous mentionnons une valeur réelle de notre inventaire, à la fin de l'année, de 900,000 dollars approximativement si l'on considère ce que l'acquisition de ces brevets nous a coûté. Notre opinion est que la valeur commerciale de notre inventaire, à la fin de l'année 1971-72, s'élevait à plusieurs fois la somme de 900,000 dollars.

Il est probable que la licence la plus remarquable que nous avons cédée l'année dernière est celle qui concerne le microscope électronique à balayage très souple d'emploi, très puissant et peu encombrant, d'une nouvelle conception et qui a été mis au point pour le Ministère des communications; licence en a été accordée sur la base de la compétence technique à une nouvelle compagnie qui a été créée dans le but de fabriquer ce microscope au Canada et de le vendre dans le monde entier. Il semble que cette compagnie soit très bien placée pour conquérir une large part du marché mondial dans ce domaine.

Comme on l'a mentionné dans le rapport de l'année dernière, nous avons cédée la licence des lasers "TEA", c'est-à-dire des lasers atmosphériques à excitation transversale, inventés par l'Etablissement de recherches pour la défense, à deux compagnies canadiennes. Une de ces compagnies a été créée tout particulièrement pour développer et exploiter ces inventions; elle a réussi à produire sa première unité qu'elle a placée sur le marché en neuf mois. Il semble que ce laser est le plus puissant de tous ceux que l'on peut trouver actuellement sur le marché. Les deux compagnies travaillent maintenant sur différents types de produits et le développement se poursuit rapidement.

Nous avons également mentionné dans notre rapport de l'année dernière que "l'île" permettant de stocker du pétrole dans la mer du Nord est en cours de construction à Stavanger, en Norvège, et qu'elle devrait être terminée et amenée sur place en septembre 1972. La structure de cette île a pu être construite grâce à l'invention du brise-lame perforé faite au Conseil national de recherches. La structure entière a environ 300 pieds de hauteur et 300 pieds de diamètre et elle reposera sur le fond de la mer du Nord à une profondeur de 230 pieds. Cette île aura une capacité de un million de barils. On envisage de construire des îles beaucoup plus grandes et reposant à de plus grandes profondeurs.

Beaucoup d'inventions, ayant fait l'objet de cessions de licences au cours des dernières années commencent à être réellement une réussite ou s'annoncent comme telle.

s'appelle maintenant "Catalogue des inventions"; ce catalogue nous a déjà valu de nombreux compléments. Nous avons participé à des foires commerciales à Halifax, à Ottawa et à Toronto où deux expositions couvraient la pollution chimique, l'art de l'ingénieur et l'électronique. Comme d'habitude, notre exposition a attirée une attention toute spéciale et nous a permis d'établir de nouveaux contacts intéressants et nombreux.

Développement

Comme nous l'avons mentionné dans notre rapport de l'année dernière, notre société n'accorde plus d'aide financière depuis 1970, à nos licenciés pour les aider à développer les inventions. Toutefois, des travaux de développement, concernant trois inventions, déjà subventionnés se sont terminés l'année dernière avec succès et il semble hautement probable que, non seulement nos licenciés en tireront des profits intéressants grâce à notre aide, mais aussi qu'il en sera de même pour le public canadien et nous-mêmes. Nous devons mentionner particulièrement notre instrument de suture vasculaire qui a été développé au Conseil national de recherche et par trois licenciés successifs pendant 15 ans; ces licenciés ont été aidés par nous pendant 10 ans. Cet instrument a pour but de permettre de joindre rapidement en bout à bout des vaisseaux coupés comme les artères, les veines, les urètres, etc.. L'instrument et ses accessoires apparaissent maintenant comme remarquables et il est fort probable que les chirurgiens du monde entier s'y intéresseront de plus en plus à l'avenir.

Les cessions de licences

L'année dernière, nous avons réussi à accorder 29 licences correspondant à 32 inventions. L'année précédente, nous avions atteint le chiffre record de 68 inventions en raison de la combinaison heureuse de plusieurs facteurs uniques; toutefois, ce chiffre était supérieur de 5 à la moyenne de 27 établie sur les cinq années précédentes. À la fin de l'année, nous avons cédé des licences à 140 compagnies et ces licences couvraient 258 inventions.

ajoutons à notre inventaire les nouvelles inventions pouvant intéresser d'éventuels licenciés et nous supprimons celles dont les brevets sont arrivés à expiration ou qui ont été dépassés ou, dans tous les cas, qui ne peuvent plus faire l'objet d'une licence. L'année dernière nous avons ajouté 52 nouvelles inventions et nous en avons supprimé 118 de sorte que nous avons actuellement, au 31 mars 1972, 685 brevets par rapport aux 751 de l'année dernière. La réduction nette de 66 est en grande partie due au fait que nous avons été obligés de rayer 97 brevets arrivés à expiration ou dépassés; la plupart de ces 97 brevets étaient plus ou moins en rapport avec l'intercepteur canadien CF-100, le turbo-réacteur Orenda ou les équipements de cet avion. Toutefois, le nombre de nouvelles inventions entrant dans l'inventaire de cette année a diminué de 27 comparativement à l'année dernière et se chiffre maintenant à 52. Ce total de 52 est inférieur à la moyenne de 68 obtenue ces dernières années et au total de 79 de l'année dernière. Au cours des dernières années, nous avons appris à ne pas nous alarmer au sujet de ces variations qui ne sont que passagères.

Parmi les inventions les plus intéressantes se trouve un ensemble de traitements d'ignifugation et de préservation du bois. Ces procédés peuvent créer de nouveaux marchés importants pour les bois et permettre d'en diversifier l'emploi.

Un nouveau type de panneaux fait avec des copeaux et donnant l'apparence du marbre attire de plus en plus l'attention. Les motifs très divers, aux couleurs agréables, sont créés durant la fabrication.

Un nouveau système de sécurité pour la monnaie, les cartes de crédit et les documents est basé sur un revêtement, à interférence optique, sur un film en plastique. Ce revêtement donne des configurations à décalage des couleurs qui sont uniques et qui sont pratiquement impossibles à déchiffrer et à imiter.

Nous disposons de plusieurs méthodes pour faire connaître nos inventions en vue d'accorder des licences mais la plus efficace est celle qui utilise notre "Répertoire des brevets" distribué en grand nombre; la plus subtile consiste à mettre nos inventions en évidence dans les grandes expositions commerciales. Durant l'année, nous avons refondu notre répertoire qui

Au 31 mars 1972, le service des brevets avait, soit directement, soit par l'intermédiaire d'agents de brevet, accumulé les brevets correspondant à 1187 inventions.

Les inventeurs

Comme les quatre dernières années, notre corporation a continué l'année dernière à décerner l'insigne enregistré de "l'inventeur" et les certificats officiels correspondants aux inventeurs qui ont obtenu un brevet ayant donné lieu à une cession de licence. L'année dernière nous avons présenté notre insigne à 72 inventeurs. Actuellement, notre total d'inventeurs reconnus s'élève à 562.

L'année dernière également, notre société a fait des recommandations au Comité des inventions des fonctionnaires pour que l'on augmente les bénéfices retirés par les fonctionnaires inventeurs par rapport aux bénéfices autorisés par la Loi régissant les inventions des fonctionnaires. Nous espérons que cette augmentation sera approuvée et qu'elle conduira à l'obtention de meilleures inventions par les fonctionnaires et en plus grand nombre.

PROMOTION, DEVELOPPEMENT ET ACCORDS DE LICENCE

Promotion des inventions

Habituellement, nous ne communiquons pas les nouvelles inventions à notre service de développement et promotion pour publicité, expositions, etc., jusqu'à ce que notre service des brevets ait déposé la première demande de brevet. Cette démarche peut demander un certain temps allant de quelques semaines à plus d'une année; la moyenne est de neuf mois. (L'obtention du brevet peut prendre une autre année et même parfois jusqu'à quatre années. Un brevet est valide pendant 17 ans à partir de la date de délivrance dans la plupart des pays). Le plus souvent nous accordons une licence au cours des six premières années mais il existe des cas où une licence n'a été accordée qu'après une quinzaine d'années. Tous les ans, nous

Durant l'année, plusieurs ministères ont fait l'objet d'une profonde réorganisation qui a eu pour résultat de faire naître deux nouveaux ministères, ce qui a réduit le nombre des autres, leurs effectifs ou leurs attributions. En conséquence, il n'a pas toujours été possible de comparer les demandes de l'année dernière avec celles des années précédentes. Sur les 216 demandes d'évaluations de brevets reçues en 1971-72, 39 (55 en 1970-71) sont venues du Conseil national de recherches du Canada, 22 du Ministère de l'environnement, 14 (20) de l'Énergie atomique du Canada limitée, 14 du Ministère de l'Énergie, des mines et des ressources, 14 du Ministère de la Défense nationale, 4 (5) du Ministère de l'agriculture et 4 (0) du Ministère de la santé nationale et du bien-être social. Des demandes d'évaluations de brevets ont été reçues de 22 universités, c'est-à-dire de 5 universités de plus que durant les années précédentes. Le plus grand nombre, en provenance d'une université, s'élevait à 9 et 11 universités ont fait au moins 4 demandes d'évaluation.

Quoique le type le plus fréquent de demande d'évaluation ait continué à être, comme toujours, du domaine des instruments de mesures, d'essais, de commandes, etc., on a remarqué une augmentation notable, l'année dernière, des demandes provenant des chercheurs en mécanique, en chimie et en métallurgie. L'augmentation du nombre des demandes pour des domaines se rapportant aux problèmes de l'environnement a été tout à fait marquée.

Prises de brevets

L'année dernière, la SCBE a déposé des demandes de brevet pour 60 inventions. On peut comparer ce chiffre à 57 en 1970-71 et à une moyenne annuelle de 65 durant les cinq années précédentes. Sur les 60 demandes de brevet faites l'année dernière, 44 ont été présentées par le service des brevets de la SCBE et les autres par différents agents de brevets canadiens. En outre la SCBE a fait 116 demandes dans d'autres pays, chiffre à comparer à 301 l'année précédente; elle a aussi suivi environ 400 demandes antérieures. Au cours des années, la SCBE a fait des demandes de brevet dans 61 pays différents.

Sources additionnelles

Au cours de l'année, des ministères et organismes fédéraux ont commencé à inclure, dans certains de leurs contrats et certaines de leurs subventions de recherche et de développement, en faveur des universités et de l'industrie, des clauses donnant à la SCBE le privilège du droit de premier refus au sujet des inventions faites dans le cadre de ces contrats et subventions. Le but de ces clauses est d'encourager et d'aider les bénéficiaires à définir et à protéger les inventions en question d'empêcher les bénéficiaires de différer indéfiniment l'exploitation adéquate des dites inventions aux dépens du public ou de les céder gratuitement à des compagnies ayant leur maison-mère à l'étranger, et d'aider à la promotion (et à certains développements, si nécessaire), à la cession et à la gestion de licences de ces inventions selon le besoin. Nous avons travaillé en étroite collaboration avec ces ministères et organismes pour établir des procédures réciproquement satisfaisantes quant à la gestion des brevets et licences correspondant aux dites inventions.

DEMANDES ET PRISES DE BREVET; INVENTEURS

Demandes d'évaluations de brevets d'inventions

Durant l'année nous avons reçu un total de 216 demandes de la part d'inventeurs ou d'organismes. Ce chiffre de 216 est à comparer à celui des 10 années précédentes, soit : 249, 206, 208, 172, 158, 134, 133, 146 et 113; on peut voir que le nombre a augmenté de 10% en moyenne par an mais que cette augmentation est tombée à environ 8% au cours des cinq dernières années.

Les fonctionnaires sont à l'origine de 125 demandes de l'année dernière (139 en 1970-71). Dans le cas des universités, le total a été de 79 alors qu'il était de 96 l'année précédente, soit très au-dessus des 59 de 1969-70. Les organismes provinciaux de recherches sont à l'origine de cinq demandes, les licenciés de la SCBE de cinq autres et les corporations fédérales de propriétaires de deux.

Bien des organismes du gouvernement fédéral ont changé de nom depuis 1948. Au fil des années la SCBE a reçu des inventions provenant de 33 ministères et organismes différents. L'année dernière nous avons reçu des demandes d'évaluation des brevets de 14 organismes fédéraux différents.

Les pouvoirs accordés dans le cadre de la Loi régissant l'exploitation des sociétés d'État (maintenant des compagnies canadiennes) ont permis à la SCBE d'offrir ses services et de passer des conventions avec des organismes en dehors du gouvernement fédéral pour régler les questions d'inventions.

Universités

La première de ces conventions a été passée avec l'Université de Colombie britannique à la fin de 1948 et la deuxième avec l'École polytechnique au début de 1949. Au cours de la dernière année nous avons mis à jour les clauses de la convention type utilisée avec les universités car elle n'avait pas été revue depuis 1959; cette mise à jour s'est faite en collaboration avec les universités et une nouvelle convention type est applicable à partir du 1^{er} avril 1972. Au 31 mars 1972, nous avons établi des conventions avec 25 universités et collèges et plusieurs autres étaient à l'étude.

Organismes provinciaux de recherche

En 1951, le Conseil de recherche du Saskatchewan est devenu le premier organisme de recherches provinciales à signer un contrat avec la SCBE. Au 31 mars 1972, nous avons signé des conventions avec sept organismes de recherches provinciales.

Autres organismes

Nous avons signé des conventions avec cinq autres organismes comme l'Institut canadien du cancer et la Commission des sanatoria du Manitoba qui reçoivent des fonds publics pour les aider dans leurs recherches.

OBJET

Les fonctions de la SCBE consistent à rendre mieux accessible au public, par l'intermédiaire de l'industrie, les produits licenciables mis au point grâce à des programmes de recherche ou de développement financés par l'Etat.

CHAMP D'ACTION

La SCBE étudie les inventions qui lui sont soumises en vue de déterminer s'il y a matière à brevet et quels sont les avantages commerciaux, ou autres, que le public pourrait en tirer; elle dépose dans divers pays des demandes de brevets pour les inventions jugées brevetables, développe certaines inventions seule ou avec l'aide d'autres organismes, afin d'en faire ressortir l'utilité ou de les rendre plus alléchantes pour les licenciés éventuels; elle lance les inventions et accorde des licences d'exploitation à l'industrie, perçoit les redevances qui en découlent et se sert de ces sommes pour couvrir ses frais d'exploitation; elle utilise ses fonds pour exécuter sa mission définie ci-dessus.

ORIGINES DES INVENTIONS

Ministères fédéraux et agences

La SCBE a été créée en 1947 par le Conseil national de recherches du Canada (CNRC) du fait que, après la Deuxième Guerre mondiale, de nombreuses inventions provenant pour la plupart du CNRC et d'autres centres de recherches financés par le gouvernement, étaient devenues brevetables. En 1948, la SCBE a commencé à travailler sur des inventions d'origine fédérale autres que celles du CNRC et, tout d'abord, sur les inventions provenant du Ministère de la reconstruction et des approvisionnements. La promulgation, en 1954, par le gouvernement fédéral de la loi régissant les inventions des fonctionnaires a eu pour effet de faire de la SCBE le principal organisme chargé de prendre des brevets et d'accorder des licences pour des inventions appartenant au gouvernement canadien.

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RAPPORT ANNUEL

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Ottawa, le 21 juin 1972.

L'honorable C. M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

Monsieur le Ministre,

Conformément à l'article 75(3) de la Loi sur l'administration financière, j'ai l'honneur de vous présenter, au nom du Conseil d'administration, le Rapport annuel de la Société canadienne des brevets et d'exploitation, pour l'exercice qui s'est terminé le 31 mars 1972, de même que l'état des finances et le rapport de l'Auditeur général du Canada.

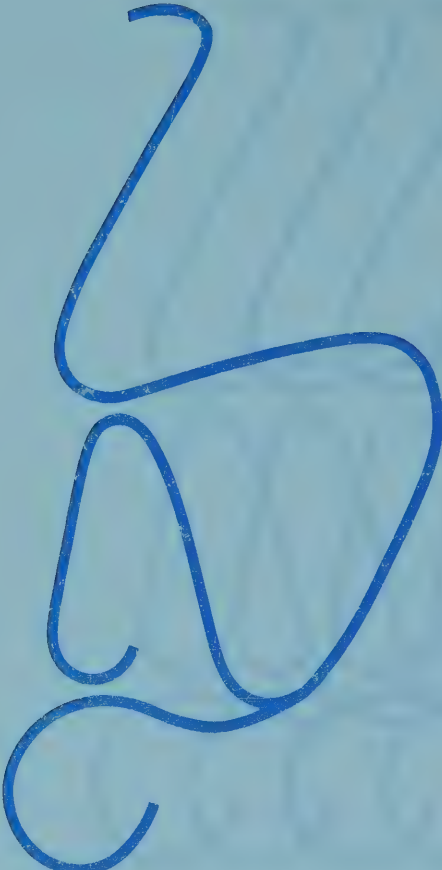
En tant que Président du Conseil du Trésor vous avez approuvé notre budget de fonctionnement pour l'année fiscale 1972-73.

Veuillez agréer, Monsieur, je vous prie, l'expression de mes sentiments les meilleurs.

R. D. Hiscocks,
Président.

SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE
(S C B E)

RAPPORT ANNUEL
1972



ANNUAL REPORT

1973

CANADIAN PATENTS AND DEVELOPMENT LIMITED

(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 11 June 1973

The Honourable C.M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Sir,

In accordance with Section 75(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1972-73. The Company's Financial Statement and the Report of the Auditor General are included.

In your capacity of President of the Treasury Board you have approved our Corporation's operating budget for the 1973-74 fiscal year.

Yours faithfully,

R. D. Hiscocks,
President.

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ANNUAL REPORT

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OBJECT

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the licensable products of publicly-financed research or development.

SPAN OF ACTIVITIES

CPDL assesses for patentability and commercial or other potential benefit to the public the disclosures of inventions from its various sources, makes filings for patents in the patent offices of various countries on those inventions which are deemed to qualify, develops alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential licensees, promotes and licenses inventions to industry, collects royalties therefrom and from these defrays the costs of its operations; and uses its funds to assist in the furtherance of its Object.

SOURCES OF INVENTIONS

Federal Departments and Agencies

CPDL was brought into being in 1947 by the National Research Council of Canada (NRC) prompted by the great accumulation of possibly-patentable material which had built up during the Second World War mostly from NRC and other government-financed research. During 1948 CPDL began handling inventions from federal sources other than NRC, the first being the Department of Reconstruction and Supply. The passage of the Public Servants Inventions Act in 1954 had the effect of making CPDL the prime patenting and licensing agency for inventions belonging to the Canadian government.

There have been many changes in names of organizations in the federal government since 1948. Over the years CPDL has received inventions from a total of 33 different departments and agencies. Last year disclosures were received from inventors in 13 federal departments and agencies.

The powers granted under the Companies Act (now the Canada Corporations Act) enabled CPDL to offer its services and to enter into agreements for handling their inventions with organizations outside the federal government, such as mentioned below.

Universities

The first such Agreement was with the University of British Columbia in late 1948 and the second was with Ecole Polytechnique in early 1949. As at 31 March 1973 CPDL Agreements with 27 universities and colleges were in effect and several more were pending.

Provincial Research Organizations

In 1951 the Saskatchewan Research Council became the first provincial research organization to contract for CPDL's services. As at 31 March 1973 Agreements with seven provincial research organizations were in effect.

Other organizations

CPDL has Agreements with five other organizations such as the National Cancer Institute of Canada and the Manitoba Sanatorium Board which are the recipients of public funds to aid in their research.

Additional Sources

During 1971-72 a number of federal departments and agencies began including in certain of their research and development contracts and grants to industry and universities clauses which reserved to the Crown first rights to any inventions

arising therefrom and named CPDL as their advisory and executive agent. A few inventions have already been received from these origins. It seems not improbable that the number of federal contracts for research containing such patent clauses will increase and will affect CPDL's workload accordingly.

DISCLOSURES, PATENTING, INVENTORS

Disclosures

A total of 270 disclosures, which the inventors thought might be patentable, were received during the year. This compares with totals of 216, 249, 206, 208, 172, 158, 134, 133 and 146 in each of the successively previous years in this ten-year period and shows an average growth of about 10% per annum.

Public servants provided 174 of last year's total compared with 125 in 1971-72. The university total was 85, up from 79 the year earlier but below the 96 in 1970-71. Provincial research organizations provided 9, and CPDL's licensees 2.

Of the 174 disclosures received from federal departments and agencies in 1972-73, 47 (39 in 1971-72) originated with the National Research Council of Canada; 33 (22) came from the Department of the Environment; 22 (14) were from Atomic Energy of Canada Limited; 19 (14) were from Department of Energy, Mines and Resources; 30 (14) were supplied by the Department of National Defence; 10 (13) came from Department of Communications; 5 (4) originated with the Department of Agriculture and 1 (4) came from the Department of National Health and Welfare. Disclosures were received from a total of 22 universities, the same number as in 1972. The highest number from any university was 11, and eight universities made four or more disclosures.

The most frequent type of disclosure continues, as always, to be instruments of various types for measuring, testing, controlling, etc. The distribution of inventions across the major technical disciplines was fairly uniform. The number of disclosures directed towards dealing with environmental problems has been substantial.

Patenting

Last year CPDL filed first applications for patent on 50 different inventions. This compares with 60 in 1971-72 and an average of 61 per year over the previous five years. Of the 50 first filings made last year 40 were filed by CPDL's Patent Branch and the remainder were let out amongst various Canadian patent agent firms. In addition CPDL made 103 further applications in additional countries - compared with 116 the previous year - and continued the prosecutions on about 400 previously filed applications. Over the years CPDL has made applications for patents in 63 different countries.

As at 31 March 1973 the patent staff had directly or through patent agent firms accumulated issue of patent on 1272 different inventions.

Inventors

As for the past four years, the Corporation last year continued to present lapel pins bearing replicas of its registered symbol "The Inventor" and formal certificates granting the right to wear to inventors on whose inventions it had been able to obtain issue of patent and had promoted for licensing. Last year CPDL made such presentations to 56 inventors. This brings the total of inventors thus recognized to six hundred and eighteen.

It had been mentioned in last year's report that the Corporation had made recommendations for amendment of the Public Servant Inventions Act Regulations to provide an increase in the amount which might be paid to public servant inventors from royalties earned by their inventions. This recommendation was approved and the amended scale now authorizes payment to the inventor of 15% of such gross royalties as his invention earns during each fiscal year. In addition, the amendment authorizes payment, by the inventor's department or agency, of fifty dollars upon the filing of a first application for patent on his invention and the payment of an additional fifty dollars if a patent application issues to patent.

PROMOTION, DEVELOPMENT, LICENSING

Promotion of Inventions

CPDL usually does not release a new invention, which appears patentable, to its Promotion and Development Branch for promotion for licensing until its Patent Branch has filed an application for patent on it. Depending on the nature of the invention, and factors which influence how rapidly it can be processed, this may range from a few weeks to several months. (Issue may take another two to four years, sometimes less, or even more. Once issued, its life in most countries is for seventeen years. However, to keep it alive in most countries, except Canada and the U.S.A., requires annual payment of renewal fees which increase yearly.) In certain circumstances details of new inventions are disclosed on a formal confidential basis to potential licensees before filing for patent has been completed. Also some disclosures which are assessed as weakly patentable at best, but contain large amounts of specialized design or know-how, are accepted and promoted for licensing on that basis. These have been increasing, largely because some new computer programs have been accepted for promotion and licensing for their know-how.

Last year 65 new inventions were released to CPDL's Development and Promotion Branch, including 16 based solely on design or know-how. Nine cases were removed from its inventory leaving a year-end total of 741 available for licensing.

CPDL's promotion of inventions includes direct approaches to companies, exhibiting at exhibitions and trade fairs, encouraging visits to CPDL's offices, utilizing and aiding departmental publicity on their inventions CPDL are handling, advertising selected inventions in a large number of compatible trade journals, employing the services of some invention-promoting companies, and publishing and distributing an Inventions Catalog to approximately 3,000 addressees. It is believed that practically every company in Canada which is, or becomes, interested in licensing the type of inventions which comprise CPDL's inventory, i.e. new, largely undeveloped, inventions,

is or soon becomes aware of CPDL. CPDL also believes that the number of such companies is still only a very few hundred.

Development of Inventions

Largely because of the nature and number of programs in other federal and provincial departments and agencies for assisting companies in the innovation of inventions, CPDL has almost totally withdrawn from this field in the last few years. However, it appears that financial and other forms of assistance by CPDL to either or both inventors and licensees on certain inventions and in certain circumstances during the transfer-of-technology phase of innovating a new invention may be unusually valuable, especially to small companies; and study of whether to re-enter the provision of assistance for development during this phase was begun late in the year.

Licensing of Inventions

Licensing activity comprised 45 new licensings entailing 54 inventions. This compares with 29 new license agreements involving 32 inventions the previous year. There was a carryover of 13 licensings which had been largely negotiated during 1971-72. Last year ended with 18 licensings similarly well along in preparation and approval.

The great majority of licensings and licensees continues to be small or medium-size Canadian companies. However, among the few foreign licensings was CPDL's first in Japan. It was for a pharmaceutical process and product the Corporation has been unable to license in Canada.

Last year's report mentioned and pictured an early stage in the construction of a 1,000,000-barrel oil-storage "island" for the North Sea. At year end it was nearing completion. Interest in further large applications is high.



Development of the Defence Research Board's TEA laser invention continues rapidly. This latest prototype is five times more powerful than others now on the market.

Le perfectionnement du Laser "TEA" inventé par le Conseil des recherches pour la défense continue rapidement. Ce dernier prototype est cinq fois plus puissant que ceux actuellement sur le marché.

Impressive progress by our licensees has continued in innovating the TEA laser and the miniature scanning electron microscope inventions which we also mentioned last year.

A method of treating the Dutch elm tree disease has become available which shows early promise of being effective. A similar situation exists in a new method of controlling spruce budworm infestations using a bacillus combined with an enzyme that would avoid ecological damage.

A process to produce lignin from waste pulping liquors appears to have good potential. The product could replace carbon black now made from oil or gas which will become increasingly scarce and expensive.

There are at least six other inventions quite new in inventory which similarly show encouraging promise of large benefit to the public.

Active defensive support has been given to one of CPDL's licensees in litigation involving the infringement of a United States patent which is considered to be invalid by eminent scientists whose opinion was sought by the licensee. An extensive investigation was also conducted into the alleged infringement of another of CPDL's United States patents to determine whether there were adequate grounds for launching a suit and if it would be beneficial to do so, considering all the factors, financial and other, involved.

FINANCIAL HIGHLIGHTS

The Corporation's Financial Statements and the Report of the Auditor General for 1972-73 reveal that expenses exceeded income by \$101,606.00, notwithstanding that royalty revenue was increased by \$60,690.00 over that of last year. This loss compares with the \$48,679.00 net loss of the previous year. The increase has been attributable to rising costs of operations, in particular expenses such as: awards to inventors, patent filing and maintenance, salaries and litigation.

The small amount of development assistance made available was on a regular recovery basis with payment being returned on billing.

The royalty revenue, as noted above, appears to reflect favourably the optimism CPDL has had regarding some of the better inventions and it is anticipated that there will be an increase in the number of such inventions taking their place in the market in the next year.

The value of the CPDL investment portfolio has decreased from \$775,250.00 to \$675,813.00 as a result of the necessity to cash Bonds to cover the 1971-72 deficit and to cover some current expenses. However, this should be considered in comparison with an increase in the value, from \$900,000.00 to \$1,000,000.00, of the CPDL inventory of patents, as explained in Note 2 to the Financial Statements.

In its endeavours to assist in bringing licensable products of publicly funded research into use for the benefit of the Canadian public, it is significant that most of the inventions licensed by CPDL result in manufacturing activity in Canada, and many of the ensuing products are sold competitively in international markets.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS



AUDITOR GENERAL OF CANADA

Ottawa, 8 June 1973

The Honourable C.M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the accounts and financial statements of Canadian Patents and Development Limited for the year ended March 31, 1973. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In compliance with the requirements of section 77 of the Financial Administration Act, I report that, in my opinion:

- (a) proper books of account have been kept by the Company;
- (b) the financial statements of the Company
 - (i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,
 - (ii) in the case of the balance sheet, give a true and fair view of the state of the Company's affairs as at the end of the financial year, and
 - (iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the Company for the financial year; and
- (c) the transactions of the Company that have come under my notice have been within the powers of the Company under the Financial Administration Act and any other Act applicable to the Company.

Yours faithfully,

sgd G.R. Long

Acting Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1973
(with comparative figures as at March 31, 1972)

	<u>Assets</u>	
	<u>1973</u>	<u>1972</u>
Current assets:		
Cash including term deposits	\$ 26,852	\$ 95,866
Accounts receivable	76,606	45,742
Interest accrued on investments	<u>12,475</u>	<u>10,503</u>
Total current assets	115,933	152,111
Investments in bonds of, or guaranteed by, Canada, at cost (market value, 1973, \$642,000; 1972, \$738,000)	675,813	775,250
Prepaid promotion expense	82,500	92,500
Patent rights at nominal value (Note 2)	1	1
Experimental equipment on loan to licensees, under shared development program, at nominal value (Note 3)	<u>1</u>	<u>1</u>
	<u>\$ 874,248</u>	<u>\$ 1,019,863</u>

The accompanying notes are an integral part of the financial statements.

Approved on behalf of the Board

sgd R.D. Hiscocks
.....
Director

Sgd W.G. Schneider
.....
Director

	<u>Liabilities</u>	
	<u>1973</u>	<u>1972</u>
Current liabilities:		
Accounts payable	\$ 181,008	\$ 221,738
Royalties paid in advance	<u>4,095</u>	<u>7,374</u>
Total current liabilities	<u>185,103</u>	<u>229,112</u>
Equity of Canada:		
Capital Stock		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus		
Balance at beginning of year	\$ 494,552	543,231
Deduct: Excess of expense over income for the year, per Statement of Income and Expense	<u>101,606</u>	<u>48,679</u>
Balance at end of year	<u>392,946</u>	<u>494,552</u>
	<u>689,145</u>	<u>790,751</u>
	<u>\$ 874,248</u>	<u>\$ 1,019,863</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of June 8, 1973, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd G.R. Long

 Acting Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED

Statement of Income and Expense for the year ended March 31, 1973
(with comparative figures for the year ended March 31, 1972)

	<u>1973</u>	<u>1972</u>
Income:		
Royalties, licensing fees, etc.	\$ 584,823	\$ 524,133
Less Awards to inventors	\$ 29,998	21,174
Payable to 3rd parties in accordance with agree- ments	<u>149,276</u>	<u>143,277</u>
	<u>179,274</u>	<u>164,451</u>
	405,549	359,682
Interest earned	49,208	50,516
Service charges under agency agreements	19,918	21,309
Profit on sale of investments	177	1,476
Development assistance recovered	<u>15,154</u>	<u>2,378</u>
	490,006	435,361
Expense:		
Salaries (Note 4)	330,051	291,700
Patent agents fees and other patenting costs (Net)	107,658	93,980
Accommodation, equipment and other rentals	51,448	51,006
Professional and special services	34,708	4,465
Office supplies, printing, equipment and furnishings	20,172	7,302
Travel	11,383	8,529
Amortization of promotion expense	10,000	10,000
Services provided by National Research Council of Canada	9,612	10,395
Communications	8,203	4,173
Development assistance	7,008	-
Miscellaneous	<u>1,369</u>	<u>2,490</u>
	<u>591,612</u>	<u>484,040</u>
Excess of expense over income	<u>\$ 101,606</u>	<u>\$ 48,679</u>

The accompanying notes are an integral part of the financial statements.

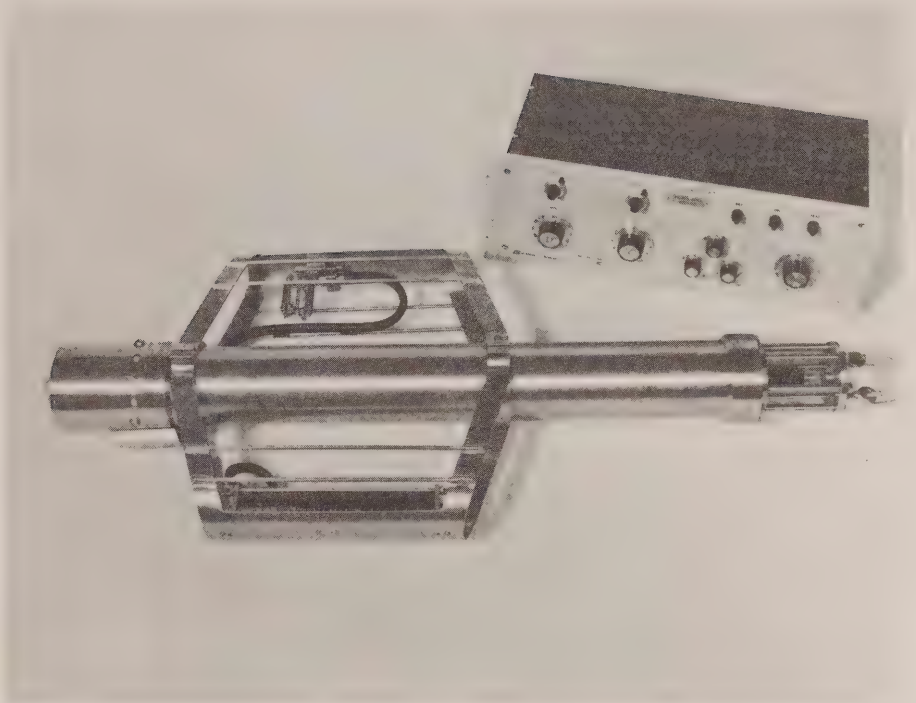
Notes to Financial Statements for the year ended March 31, 1973

- 1 . Changes in the classification of certain income and expenses were made during the year, and the figures for the previous year have been adjusted for purposes of comparison.
- 2 . At March 31, 1973, the Corporation had expended approximately \$1,000,000 on unexpired patent rights for inventions. In accordance with Corporation practice, expenditures relating to the acquisition and maintenance of patent rights are charged to expense as incurred and income, if any, derived from these patent rights is recorded when received or reported by the licensee.
- 3 . The cost value of experimental equipment on loan at the year-end was \$155,780. Expenditure on experimental equipment is charged to expense as incurred and any proceeds on disposal are recorded as income in the year received.
- 4 . Salaries for 1973 include remuneration of directors as directors \$1,375 and remuneration of officers \$49,700. The Company has twelve directors and five officers. Two officers are also directors.
- 5 . Not reflected in the financial statements are royalties estimated at \$172,000, extending over a period of years, due under an agreement with a foreign licensee and in dispute because of differences between that licensee and a third party government and others using the invention.
- 6 . A contingent liability of approximately \$36,000 exists with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.



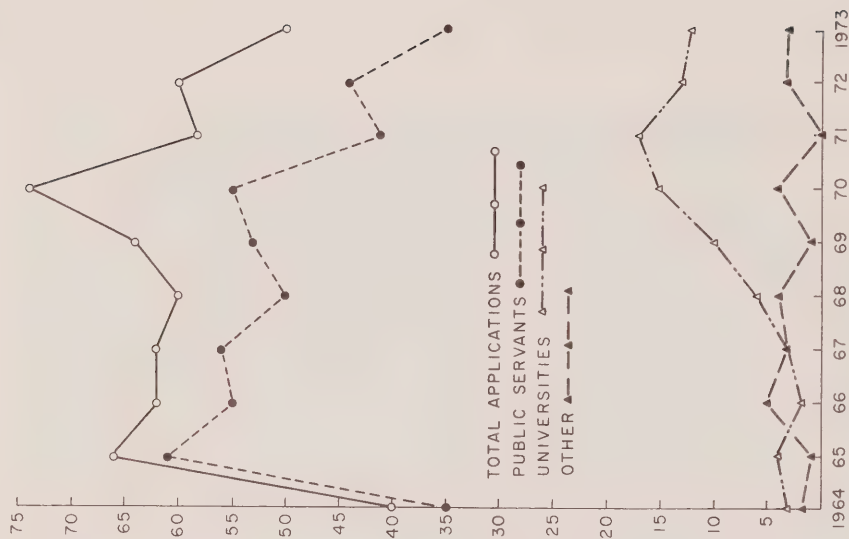
This Icing Detector for helicopters (inset) detects icing conditions before ice build-up on rotor blades starts.

Ce détecteur de givre (encart) signale le danger de givrage avant que la glace ne commence à se former sur les pales du rotor.



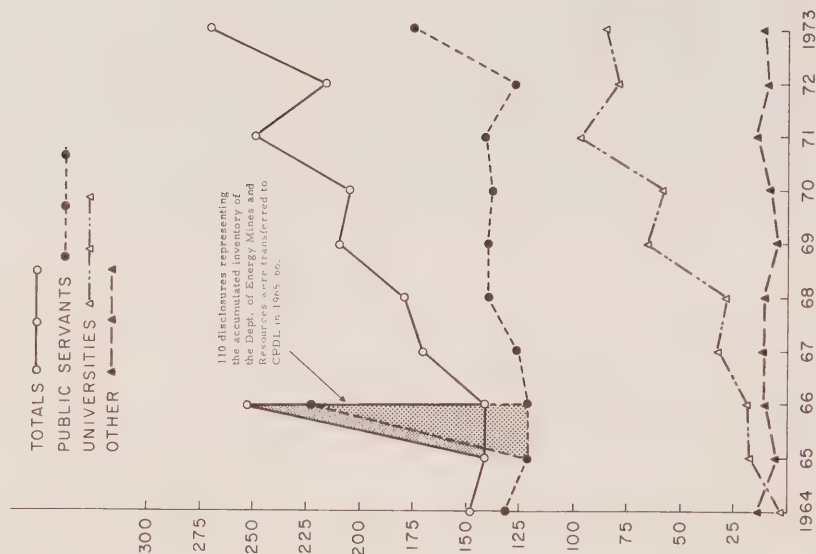
This probe is used by oceanographers to make fast measurements of change in temperature and salinity with depth.

Cette sonde est utilisé par les océanographes pour mesurer rapidement les variations de température et de salinité en fonction de la profondeur.

DISCLOSURES RESULTING IN
APPLICATIONS FOR PATENTS

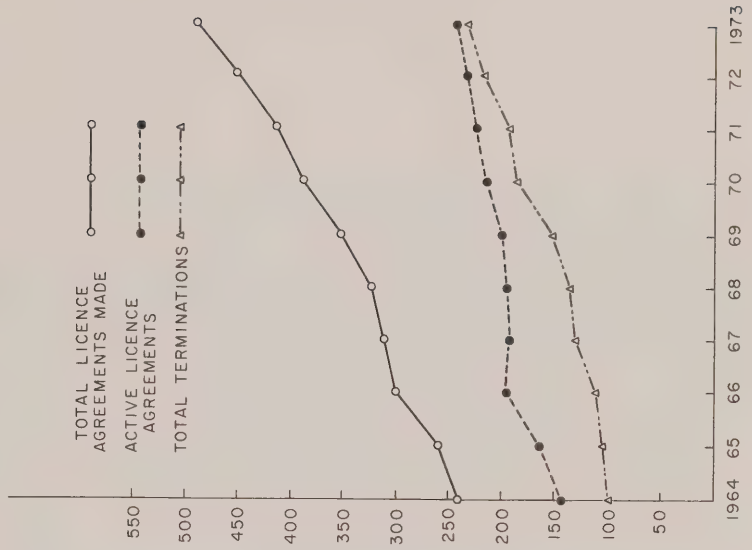
Note - Does not include filings for patents on inventions disclosed from the Dept. of National Defence. Such filings have already been made before disclosure.

DISCLOSURES OFFERED BY INVENTORS

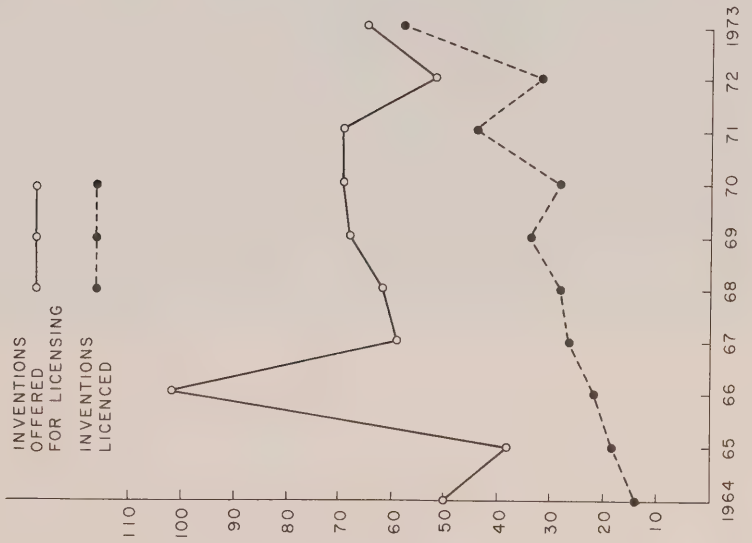


Note - Disclosures from Dept. of National Defence are assessed and patent applied for before forwarding to CPDL.

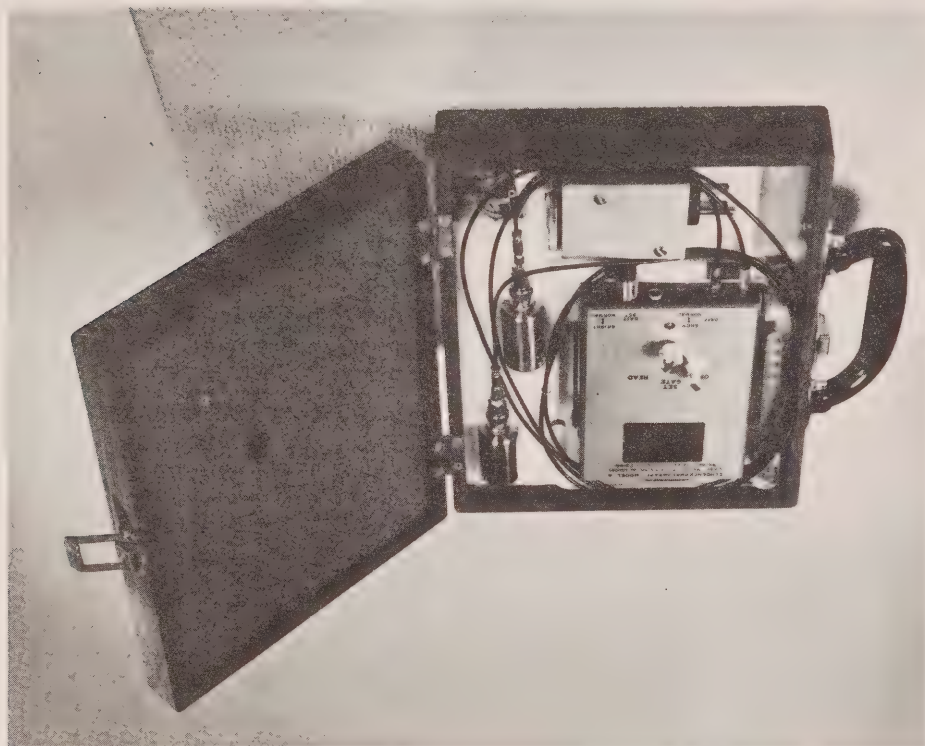
CUMULATIVE LICENSING TOTALS



PROMOTION AND LICENSING



This inexpensive echoencephalograph will enable doctors to detect brain injury or disease.
Cet écho encéphalographe portatif permettra aux médecins de détecter les maladies ou lésions du cerveau.





Developed by the military, these combat spectacle frames may soon be available for children and sportsmen.

Mise au point par l'armée, cette monture de lunette "de combat" sera peut-être commercialisée bientôt. Elle serait utile, par exemple, aux enfants et aux sportifs.

1. Au cours de l'année, on a changé le classement de certains postes de revenus et de dépenses, on a donc rajusté les chiffres de l'année précédente en conséquence afin de permettre les comparaisons.

2. Au 31 mars 1973, la Corporation avait dépensé environ \$1 000 000 pour des droits de brevets non expirés. Conformément à la procédure habituelle, les dépenses relatives à l'acquisition ou au maintien des droits de brevets sont portées aux dépenses et le revenu éventuel des droits de brevets est enregistré lorsqu'il est reçu ou déclaré par le concessionnaire.

3. A la fin de l'année, la valeur du matériel expérimental emprunté se chiffrait à \$155 780. Les dépenses en matériel expérimental sont portées aux dépenses au fur et à mesure qu'elles sont engagées et tout produit provenant de la vente de ce matériel est porté au revenu de l'année.

4. Les traitements de l'année 1973 comprennent la rémunération des administrateurs à ce titre, soit \$1 375 et la rémunération des fonctionnaires qui s'est chiffrée à \$49 700. La Société compte douze administrateurs et cinq fonctionnaires. Deux fonctionnaires sont également administrateurs.

5. Les états financiers ne font pas état des redevances évaluées à \$172 000 qui s'échelonnent sur un certain nombre d'années et qui sont dues en vertu d'une convention avec un concessionnaire étranger. Ces redevances sont contestées à cause de certains différends qui existent entre le concessionnaire, un tiers gouvernement et d'autres personnes qui utilisent l'invention.

6. Il existe un passif imprévu d'environ \$36 000 provenant d'impôts qui n'ont pas été déduits à la source sur les redevances versées par un concessionnaire étranger.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITEE

Etat des revenus et dépenses pour l'année terminée le 31 mars 1973
(Avec chiffres comparatifs pour l'année terminée le 31 mars 1972)

	1973	1972
Revenus:		
Redevances, droits de concession		
de brevets, etc.	\$ 584,823	\$ 524,133
Moins: Primes versées aux inventeurs		
Sommes à payer à des tiers	\$ 29,998	21,174
conformément aux accords	149,276	143,277
	<u>179,274</u>	<u>164,451</u>
Intérêt gagné	405,549	359,682
Remboursements et commissions selon des conventions de mandataire	19,918	21,309
Profit sur vente de placements	177	1,476
Recouvrement de frais d'aide au développement	15,154	2,378
	<u>490,006</u>	<u>435,361</u>
Dépenses:		
Traitement (Note 4)	330,051	291,700
Honoraires des agents de brevets et autres frais de brevets (nets) et autres	107,658	93,980
Installations, équipement et autres		
frais de location	51,448	51,006
Services spéciaux et professionnels	34,708	4,465
Papeterie, fournitures, impression, équipement et mobilier de bureau	20,172	7,302
Frais de voyage	11,383	8,529
Amortissement des frais de lancement	10,000	10,000
Services fournis par le Conseil National de Recherches	9,612	10,395
Communications	8,203	4,173
Frais d'aide au développement	7,008	-
Divers	1,369	2,490
	<u>591,612</u>	<u>484,040</u>
Excédent des dépenses sur les revenus	\$ 101,606	\$ 48,679

Les notes ci-jointes font partie intégrante des états financiers.

Passif

1973	1972
\$ 181,008	\$ 221,738
Comptes à payer	
Exigibilités:	
Redevances payées d'avance	
4,095	7,374
Total du passif exigible	
185,103	229,112
Avoir de l'Etat:	
Capital-actions:	
Autorisé - 10,000 actions sans	
valeur nominale	
Emis - 5,000 actions, entièrement	
libérées	
296,199	296,199
Excédent:	
\$ 494,552	543,231
Solde au début de l'année	
A déduire Excédent des	
dépendances sur les revenus	
pour l'année d'après l'état	
des revenus et dépenses	
101,606	48,679
Solde à la fin de l'année	
392,946	494,552
689,145	790,751
\$ 874,248	\$ 1,019,863

J'ai examiné le bilan ci-dessus et l'état des revenus et dépenses s'y
afférant et le 8 juin 1973, j'en ai fait rapport au Président du Comité des
recherches scientifiques et industrielles et Conseil privé.

L'Auditeur général intérimaire du Canada
signé G. R. Long

Actif		
1973	1972	
Disponibilités		
Encaisse inclû dépôt à termes	\$ 26,852	\$ 95,866
Comptes à recevoir	76,606	45,742
Intérêt couru sur placements	12,475	10,503
Total de l'actif disponible	115,933	152,111
Placement sur obligations émises ou garanties par le Canada, au prix coûtant, (valeur boursière, 1973, \$642,000; 1972, \$738,000)	675,813	775,250
Frais de lancement payés d'avance	82,500	92,500
Les droits de brevets, valeur nominale (Note 2)	1	1
Équipement expérimental prêté à des concessionnaires, en vertu du programme de développement à frais partagés, valeur nominale (Note 3)	1	1
	\$ 874,248	\$ 1,019,863

Les notes ci-jointes font partie intégrante des états financiers.
Approuvé au nom du Conseil d'administration:

Administrateur
signé R. D. Hiscocks

Administrateur
signé W. G. Schneider



Ottawa, le 8 juin 1973

L'honorable C. M. Drury,
Président du Comité des recherches
scientifiques et industrielles du Conseil privé,
Ottawa.

Monsieur le Président,

J'ai examiné les comptes et les états financiers de la Société canadienne des brevets et d'exploitation limitée, pour l'année close le 31 mars 1973. Mon examen a comporté une revue générale des procédés comptables ainsi que les sondages des registres comptables et autres preuves à l'appui que j'ai jugés nécessaires dans les circonstances.

Conformément aux prescriptions de l'article 77 de la Loi sur l'administration financière, je déclare, qu'à mon avis :

a) la Société a tenu des livres de comptabilité appropriés;

b) les états financiers de la Société

- i) ont été dressés sur une base comparable à celle de l'année précédente et sont en accord avec les livres de comptabilité,
- ii) présentent, au bilan, un exposé juste et fidèle
- iii) présentent, à l'état des revenus et dépenses, un exposé juste et fidèle des revenus et des dépenses de la Société pour l'année financière

et

c) les opérations financières de la Société qui sont venues à ma connaissance étaient de la compétence de la Société en vertu de la Loi sur l'administration financière et toute autre loi pertinente.

Veillez agréer, Monsieur le Président, l'expression de mes sentiments les meilleurs.

L'Auditeur général intérimaire du Canada
signé
G. R. Long

RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

ASPECT FINANCIERS

Les états financiers de la Société et le rapport de l'Auditeur Général pour l'année 1972-73 montrent que nos dépenses dépassaient nos recettes de \$101 606,00, bien que les revenus provenant des redevances aient augmenté de \$60 690,00 par rapport à l'année dernière. Si l'on compare avec l'année précédente, le déficit net s'était alors chiffré à \$48 679,00. Cette hausse est attribuable à l'augmentation des coûts d'exploitation, et surtout des dépenses telles les primes versées aux inventeurs, les dépenses relatives à l'acquisition et au maintien des droits de brevets, les traitements et le procès.

Les sommes peu importantes qui ont été versées pour l'aide au développement doivent être remboursées par paiements réguliers sur présentation des factures.

Le revenu provenant des redevances, auquel on fait allusion précédemment, semble témoigner de l'optimisme de la SCBE à l'égard de certaines inventions fort ingénieuses et l'on prévoit qu'au cours de l'année prochaine le nombre des inventions de ce genre qui seront mises en marché ira en augmentant.

Les investissements de la SCBE sont passés de \$775 250,00 à \$675 813,00 parce que la Société a dû convenir des obligations afin de combler le déficit de l'année 1971-72 pour couvrir certaines dépenses courantes. Il faut toutefois songer à l'augmentation de valeur des brevets détenus, en effet elle est passée de \$900 000,00 à \$1 000 000,00. On fait état de cette augmentation à la Note 2 des états financiers.

En contribuant à mettre à la disposition du public canadien des produits licenciables, résultant de travaux financiers par les fonds publics, il est significatif que la plupart des inventions brevetées par SCBE sont fabriquées au Canada et sont vendues en concurrence sur le marché international.

fois accordé une licence au Japon. Il s'agissait d'un procédé de fabrication et d'un produit pharmaceutiques pour lequel la SCBE n'avait pas réussi à accorder de licence au Canada.

Le rapport de l'an dernier décrivait et illustrait les premiers stades de construction d'un dépôt de pétrole dans la mer du Nord ayant une capacité de un million de barils. A la fin de l'année, la construction en était presque terminée. Bien des gens s'intéressent aux grandes applications de ce dépôt.

Les détenteurs de licences ont fait des progrès remarquables en développant le laser "TEA" et le petit microscope électronique à balayage dont nous avons parlé dans notre dernier rapport annuel.

Un moyen de traiter la maladie hollandaise de l'orme nous est parvenu et d'après les constatations faites jusqu'à présent, on croit bien qu'il sera très efficace. On a aussi reçu une nouvelle méthode de lutte contre les infestations de la tordeuse des bourgeons d'épinette. Elle consiste à combiner un bacille à un enzyme ce qui permet d'éviter la détérioration écologique.

De plus, un procédé pour produire de la lignine à partir de solutions résiduaires de cellulose semble avoir un grand potentiel. Le nouveau produit remplacerait le noir de fumée qui est obtenu à partir de l'huile ou du pétrole et qui deviendra de plus en plus rare et de plus en plus onéreux.

Au moins six autres inventions qui viennent tout juste d'être inscrites à l'inventaire semblent fort prometteuses et se révéleront d'une grande utilité pour le public.

La SCBE a accordé son appui pour défendre l'un de ses licenciés qui avait été accusé d'avoir contrefait un brevet des Etats-Unis que certains scientifiques importants consultés par le licencié ne considéraient pas valable. On a aussi mené une enquête complète sur la prétendue contrefaçon d'un autre brevet américain de la SCBE afin de déterminer s'il y avait des motifs valables pour tenter une action en contrefaçon et de juger si une telle entreprise était avantageuse étant donné tous les facteurs, financiers et autres.

expositions commerciales ou autres, invite les gens à visiter ses bureaux, aide les ministères à promouvoir et à faire connaître les inventions dont elle s'occupe, annonce des inventions choisies dans un grand nombre de revues commerciales, fait appel aux services des sociétés qui se spécialisent dans la promotion des inventions, publie le Catalogue des inventions et le distribue à plus de 3 000 personnes et sociétés. On croit que presque toutes les compagnies du Canada qui désirent obtenir une licence d'exploitation pour les inventions contenues dans l'inventaire de la SCBE, c'est-à-dire des inventions nouvelles et non-perfectionnées, connaissent la SCBE. On croit aussi que le nombre de ces compagnies ne s'élève guère à plus de quelques centaines.

Le développement des inventions

Au cours des dernières années, la SCBE s'est presque complètement retirée de ce domaine surtout à cause de la nature et du nombre des programmes des autres ministères et agences provinciaux et fédéraux visant à promouvoir les inventions. Il semble toutefois que l'aide pécuniaire ainsi que toutes les autres formes d'appui fournies par la SCBE aux inventeurs et aux détenteurs de licences pour certaines inventions et dans certains cas pendant la période de changement d'équipement qui survient lors de l'exploitation d'une nouvelle invention peuvent se révéler fort utiles surtout s'il s'agit de petites entreprises. A la fin de l'année, la SCBE a commencé à étudier la question de savoir s'il fallait recommencer à fournir de l'aide aux entreprises durant cette période.

La cession de licences

Nous avons accordé 45 nouvelles licences correspondantes à 54 inventions. L'année précédente nous avions accordé 29 licences pour 32 inventions. Il y a eu un report de 13 licences qui avaient été surtout négociées en 1971-72. A la fin de l'année dernier, il y avait 18 licences en voie de préparation et qui devaient être accordées sous peu.

La plupart des licences sont accordées à des petites et aux moyennes entreprises canadiennes. Parmi les quelques licences accordées à l'étranger, la SCBE a pour la première

l'année financière. En outre, l'amendement autorise le ministère ou l'agence dont relève l'inventeur à lui verser la somme de cinquante dollars lors de sa première demande de brevet pour son invention, ainsi qu'un autre montant de cinquante dollars si sa demande de brevet est acceptée.

PROMOTION, DEVELOPPEMENT ET ACCORDS DE LICENCES

Promotion des inventions

Habituellement, la SCBE ne communique pas les nouvelles inventions qui semblent brevetables à son service d'exploration et de lancement pour la promotion et l'accord de licences jusqu'à ce que son service des brevets ait déposé la première demande de brevet. Cette démarche peut demander un certain temps allant de quelques semaines à plusieurs mois selon la nature des inventions et les facteurs qui en influencent la vitesse de traitement. (L'obtention d'un brevet peut prendre de deux à quatre ans. Dans la plupart des pays, un brevet est valide pendant 17 ans à partir de la date de délivrance. De même, dans la majorité des pays, la Canada et les États-Unis exceptés, le détenteur du brevet doit payer annuellement des frais de renouvellement qui augmentent tous les ans). Il arrive parfois qu'on dévoile les particularités d'une nouvelle invention, à titre confidentiel, à des licenciés éventuels avant que le brevet ne soit déposé. En outre, certaines divulgations qui se révèlent peu brevetables, mais qui sont fort bien conçues et fort ingénieuses sont acceptées et on tente d'en vendre la technique. Le nombre de ces divulgations s'est accru surtout parce qu'on a accepté de lancer et d'accorder des licences pour certains programmes d'ordinateurs à cause de leur ingéniosité.

L'an dernier le Service de Lancement et d'Exploitation de la SCBE a reçu 65 nouvelles inventions, dont 16 étaient fondées exclusivement sur la conception et l'ingéniosité. Nous en avons supprimé neuf de l'inventaire et à la fin de l'année, il en restait donc 741 qui pouvaient faire l'objet d'une licence.

Afin de lancer les inventions, la SCBE entre directement en contact avec les sociétés, réserve des stands dans des

Comme toujours, le type le plus fréquent de demandes d'évaluation a été pour des instruments de mesures, d'essais, de commande, etc. La répartition des inventions dans les principales disciplines techniques était assez uniforme. Il y a eu un nombre considérable de demandes pour des inventions visant à résoudre certains problèmes de l'environnement.

Prises de brevets

L'année dernière, la SCBF a déposé des demandes de brevet pour 50 inventions. On peut comparer ce chiffre à 60 en 1971-72 et à une moyenne annuelle de 61 durant les cinq années précédentes. Sur les 50 demandes de brevet faites l'année dernière, 40 ont été présentées par le service des brevets de la SCBF et les autres par différents agents de brevets canadiens. En outre la SCBF a fait 103 demandes dans d'autres pays, chiffre à comparer à 116 l'année précédente; elle a aussi suivi environ 400 demandes antérieures. Au cours des années, la SCBF a fait des demandes de brevet dans 63 pays différents.

Au 31 mars 1973, le service des brevets avait, soit directement, soit par l'intermédiaire d'agents de brevet, accumulé les brevets correspondant à 1272 inventions.

Les inventeurs

Comme les quatre dernières années, notre corporation a continué l'année dernière à décerner l'insigne enregistré de "l'inventeur" et les certificats officiels correspondants aux inventeurs qui ont obtenu un brevet ayant donné lieu à une cession de licence. L'année dernière nous avons présenté notre insigne à 46 inventeurs. Actuellement, notre total d'inventeurs reconnus s'élève à 1272.

Dans le rapport annuel de l'an dernier, nous avons mentionné que notre société avait proposé des amendements au Règlement régissant les Inventions des Fonctionnaires Publics afin d'augmenter le pourcentage des redevances versées aux inventeurs fonctionnaires sur les redevances provenant de leurs inventions. La proposition fut adoptée et l'échelle amendée autorise maintenant les inventeurs à toucher 15 pour cent des redevances brutes, perçues pour leurs inventions au cours de

inventions faites dans le cadre de ces contrats et nommant la SCBE pour agir à titre d'agent consultatif et administratif. Nous avons déjà reçu quelques inventions de ces sources. Il semble probable que le nombre de contrats de recherche fédéraux contenant de telle clauses ira en augmentant et qu'ils modifieront le volume de travail de la SCBE.

DEMANDES ET PRISES DE BREVETS; INVENTEURS

Demandes d'évaluation de brevets d'invention

Durant l'année, nous avons reçu 270 demandes de la part d'inventeurs qui croyaient que leurs inventions étaient brevetables. On peut comparer ce chiffre au total de chacune des dix années précédentes, soit à 216, 249, 206, 208, 172, 158, 134, 133 et 146, ce qui représente une augmentation annuelle moyenne de 10 pour cent.

Les fonctionnaires sont à l'origine de 174 demandes l'année dernière comparativement à 125 en 1971-72. Dans le cas des universités, les demandes se chiffraient à 85, soit une augmentation par rapport à l'année précédente alors qu'elles avaient totalisé 79, mais une diminution par rapport à 1970-71 alors qu'elles s'étaient chiffrées à 96. Les organismes provinciaux de recherches sont à l'origine de 9 tandis que les licenciés de la SCBE en ont soumis deux.

Sur les 174 demandes d'évaluation de brevets reçues des ministères et organismes fédéraux en 1972-73, 47 (39 en 1971-72) sont venues du Conseil National de Recherches du Canada, 33 (22) du Ministère de l'Environnement, 22 (14) de l'Énergie Atomique du Canada limitée, 19 (14) du Ministère de l'Énergie, des Mines et des Ressources, 30 (14) du Ministère de la Défense Nationale, 10 (13) du Ministère des Communications, 5 (4) du Ministère de l'Agriculture, 1 (4) du Ministère de la Santé Nationale et du Bien-Être Social. Vingt-deux universités ont envoyé des demandes d'évaluation de brevets, soit le même nombre que l'année précédente. Une université a fait parvenir 11 demandes, ce qui représente le nombre le plus élevé pour une université, tandis que huit universités en ont soumis quatre ou plus.

Bien des organismes du gouvernement fédéral ont changé de nom depuis 1948. Au fil des années, la SCBE a reçu des inventions provenant de 33 ministères et organismes différents. L'année dernière nous avons reçu des demandes d'évaluation de brevets de 13 ministères et organismes.

Les pouvoirs accordés dans le cadre de la Loi régissant l'exploitation des sociétés d'Etat (maintenant des compagnies canadiennes) ont permis à la SCBE d'offrir ses services et de passer des conventions avec des organismes en dehors du gouvernement fédéral pour régler les questions d'inventions.

Universités

La première de ces conventions a été passée avec l'Université de la Colombie Britannique à la fin de 1948 et la deuxième avec l'Ecole Polytechnique au début de 1949. Au 31 mars 1973, la SCBE avait établi des conventions avec 27 universités et collèges et plusieurs autres étaient à l'étude.

Organismes provinciaux de recherche

En 1951, le Conseil de recherche de la Saskatchewan est devenu le premier organisme de recherches provincial à signer un contrat avec la SCBE. Au 31 mars 1973, nous avions signé des conventions avec sept organismes de recherches provinciaux.

Autres organismes

La SCBE a signé des conventions avec cinq autres organismes comme l'Institut Canadien du Cancer et la Commission des Sanatoriums du Manitoba qui reçoivent des fonds publics pour les aider dans leurs recherches.

Sources additionnelles

Au cours de l'année 1971-72, des ministères et organismes fédéraux ont commencé à inclure, dans certains de leurs contrats et certaines de leurs subventions de recherche, et de développer, en faveur des universités et de l'industrie, des clauses donnant à la Couronne le droit de priorité sur les

OBJET

Les fonctions de la SCBE consistent à rendre plus accessibles au public, par l'intermédiaire de l'industrie, les produits licenciables mis au point grâce à des programmes de recherche ou de développement financés par l'Etat.

CHAMP D'ACTION

La SCBE étudie les inventions qui lui sont soumises en vue de déterminer s'il y a matière à brevet et quels sont les avantages commerciaux, ou autres, que le public pourrait en tirer: elle dépose dans divers pays des demandes de brevets pour les inventions jugées brevetables, développe certaines inventions seule ou avec l'aide d'autres organismes, afin d'en faire ressortir l'utilité ou de les rendre plus alléchantes pour les licenciés éventuels; elle lance des inventions et accorde des licences d'exploitation à l'industrie, perçoit les redevances qui en découlent et se sert de ces sommes pour couvrir ses frais d'exploitation; elle utilise ses fonds pour exécuter sa mission définie ci-dessus.

ORIGINES DES INVENTIONS

Ministères fédéraux et agences

La SCBE a été créée en 1947 par le Conseil National de Recherches du Canada (CNR) du fait, après la Deuxième Guerre mondiale, d'une accumulation d'inventions brevetables provenant pour la plupart du CNRC et d'autres centres de recherches financées par le gouvernement. En 1948, la SCBE a commencé à travailler sur des inventions d'origine fédérale autres que celles du CNRC et, tout d'abord, sur les inventions provenant du Ministère de la reconstruction et des approvisionnements. La promulgation, en 1954, par le gouvernement fédéral de la Loi sur les Inventions des Fonctionnaires Publics a eu pour effet de faire de la SCBE le principal organisme chargé de prendre des brevets et d'accorder des licences pour des inventions appartenant au gouvernement canadien.

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		E. Rymek
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	Comptabilité	H. Scharf
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		Ministère de la Justice
VERIFICATEUR		Auditeur général du Canada
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SIEGE SOCIAL		275, rue Slater, Ottawa, Ontario. KIA OR3

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Directeur général, Sciences et technologie,
Ministère de l'Industrie et du commerce

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CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 11 juin 1973

L'honorable C.M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

Monsieur le Ministre,

Conformément à l'article 75(3) de la Loi sur l'administration financière, j'ai l'honneur de vous présenter, au nom du Conseil d'administration, le Rapport annuel de la Société canadienne des brevets et d'exploitation, limitée, pour l'exercice qui s'est terminé le 31 mars 1973, de même que l'état des finances et le rapport de l'Auditeur général du Canada.

En tant que Président du Conseil du Trésor vous avez approuvé notre budget de fonctionnement pour l'année fiscale 1973-74.

Veuillez agréer, Monsieur, je vous prie, l'expression de mes sentiments les meilleurs.

R. D. Hiscocks,
Président.

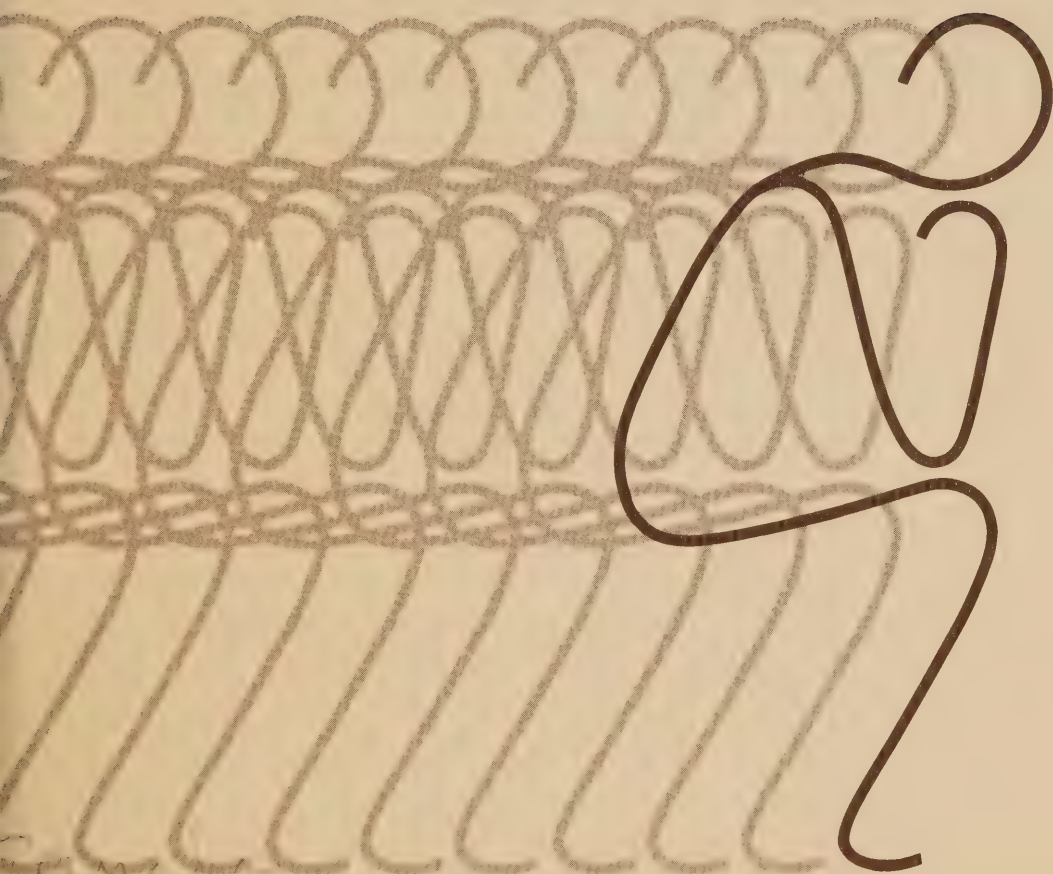


RAPPORT ANNUEL 1973

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ANNUAL REPORT

1974

CANADIAN PATENTS AND DEVELOPMENT LIMITED

(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 14 June 1974

The Honourable C.M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Sir,

In accordance with Section 75(3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1973-74. The Company's Financial Statement and the Report of the Auditor General are included.

In your capacity of President of the Treasury Board you have approved our Corporation's operating budget for the 1974-75 fiscal year.

Yours faithfully,

R. D. Hiscocks,
President.

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Department of Justice

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The Auditor General of Canada

BANKERS

The Canadian Imperial Bank of
Commerce

HEAD OFFICE

275 Slater Street
Ottawa, Ontario. K1A 0R3

OBJECT

Expressed in tabloid form the Object of CPDL is to assist in making more available to the public, through industry, the licensable products of publicly-financed research or development.

SPAN OF ACTIVITIES

CPDL assesses for patentability and commercial or other potential benefit to the public the disclosures of inventions from its various sources, makes filings for patents in the patent offices of various countries on those inventions which are deemed to qualify, develops alone or jointly with others certain inventions to clarify their utility or otherwise make them more attractive to potential licensees, promotes and licenses inventions to industry, collects royalties therefrom and from these defrays the costs of its operations; and uses its funds to assist in the furtherance of its Object.

SOURCES OF INVENTIONS

Federal Departments and Agencies

CPDL was brought into being in 1947 by the National Research Council of Canada (NRC) prompted by the great accumulation of possibly-patentable material which had built up during the Second World War mostly from NRC and other government-financed research. During 1948 CPDL began handling inventions from federal sources other than NRC, the first being the Department of Reconstruction and Supply. The passage of the Public Servants Inventions Act in 1954 had the effect of making CPDL the prime patenting and licensing agency for inventions belonging to the Canadian government.

There have been many changes in names of organizations in the federal government since 1948. Over the years CPDL has received inventions from a total of 33 different departments and agencies. Last year disclosures were received from inventors in 9 federal departments and agencies.

The powers granted under the Companies Act (now the Canada Corporations Act) enabled CPDL to offer its services and to enter into agreements for handling their inventions with organizations outside the federal government, such as mentioned below.

Universities

The first such Agreement was with the University of British Columbia in late 1948 and the second was with Ecole Polytechnique in early 1949. As at 31 March 1974 CPDL Agreements with 27 universities and colleges were in effect and several more were pending.

Provincial Research Organizations

In 1951 the Saskatchewan Research Council became the first provincial research organization to contract for CPDL's services. As at 31 March 1974 Agreements with seven provincial research organizations were in effect.

Other organizations

CPDL has Agreements with five other organizations such as the National Cancer Institute of Canada and the Manitoba Sanatorium Board which are the recipients of public funds to aid in their research.

Companies

Since 1971-72 an increasing number of departments and agencies have been including in their research and development contracts and grants to industry and universities, clauses which reserved to the Crown first rights to any inventions arising therefrom and named CPDL as their advisory and

executive agent. On this account CPDL's types of sources of disclosures last year began to include Canadian companies which had received development contracts.

DISCLOSURES, PATENTING, INVENTORS

Disclosures

A total of 312 disclosures, which the inventors thought might be patentable were received during the year. This compares with totals of 270, 216, 249, 206, 208, 172, 158, 134 and 133 in each of the successively previous years in this ten-year period,

Public Servants provided 187 of last year's total compared with 174 in 1972-73. The university total was 118, up from 85 the year earlier. Provincial research organizations provided 2, and CPDL's licensees 4.

Of the 187 disclosures received from federal departments and agencies in 1973-74, 45 (22 in 1972-73) originated with Atomic Energy of Canada Limited; 40 (30) were from the Department of National Defence; 37 (47) were from the National Research Council of Canada; 22 (33) were supplied by the Department of Environment; 18 (10) came from the Department of Communications; 14 (19) originated with the Department of Energy Mines and Resources; 6 (5) came from the Department of Agriculture; 4 (1) were received from the Department of National Health and Welfare and 1 (0) came from the Post Office. Disclosures were received from a total of nineteen universities. The highest number from any university was 14 and thirteen universities made four or more disclosures.

The distribution of disclosures across the major technical disciplines was fairly uniform. The most frequent type of disclosure continues, as always, to be instruments of various types for measuring, testing, controlling, etc. The number of disclosures directed towards dealing with environmental problems has been substantial.

Patenting

Last year CPDL filed first applications for patent on 53 different inventions. This compares with 50 in 1972-73 and an average of 60 per year over the previous five years. Of the 53 first filings made last year 46 were filed by CPDL's Patent Branch and the remainder were let out amongst various Canadian patent agent firms. In addition CPDL made 144 further applications in additional countries - compared with 103 the previous year - and continued the prosecutions on about 400 previously filed applications. Over the years CPDL has made applications for patents in 68 different countries.

As at 31 March 1974 the patent staff had directly or through patent agent firms accumulated issue of patent on 1317 different inventions.

Inventors

As for the past four years, the Corporation last year continued to present lapel pins bearing replicas of its registered symbol "The Inventor" and formal certificates granting the right to wear to inventors on whose inventions it had been able to obtain issue of patent and had promoted for licensing. Last year CPDL made such presentations to 46 inventors. This brings the total of inventors thus recognized to six hundred and sixty-four.

1973-74 was the first full year wherein the enlarged scale of awards to a public servant inventor, as authorized by the Public Servant Inventions Act Regulations was in force. The new scale is 15% of the gross royalties earned by his invention in each fiscal year. Further, the inventor may be paid fifty dollars by his department or agency when the first application for patent has been made and again when the first patent has issued.

The 1973-74 figures on disclosures do not permit a conclusion on the effect of this enhanced inducement to invent.

PROMOTION, DEVELOPMENT, LICENSING

Promotion of Inventions

CPDL's inventory is comprised mainly of new, largely undeveloped inventions although there are many which have had some additional work done on them or are accompanied by considerable amounts of "know-how". Several consist entirely of know-how.

Last year 79 new inventions were released to our promotion and development staff, including 17 comprised solely on design or know-how. 30 inventions were removed from inventory leaving a year-end total of 764.

CPDL methods of promoting inventions include direct approaches to companies, exhibiting at trade fairs and industrial shows, using and aiding departments in their publicizing of their inventions, advertising selected inventions in a large number of pertinent trade journals, utilizing the services - usually at no cost - of invention promoting companies, encouraging company visits to CPDL offices (and invention-display room) - a very useful action for those who respond - and publishing, distributing and updating an Inventions Catalog, free of charge to over 3000 addressees. In addition CPDL receives considerable free publicity from news media.

The promotion of inventions for licensing is usually withheld until - but only until - the first application for patent has been filed. However in certain circumstances the details of a new invention may be disclosed earlier, on a formal confidential basis, to a potential licensee.

Offers of first rights of refusal to license inventions arising from "make or buy" research, or the like, contracts placed by the Department of Supply and Services or other federal departments or agencies are commonly made to the companies which received the contracts.

In its promotion of inventions CPDL tries very hard to license Canadian-based companies. CPDL is also conscious of

the federal Government's objective of fostering a wider and more uniform distribution of industry across Canada. However the number of companies in Canada interested in licensing and innovating undeveloped inventions into commercial production or use seems to be less than five hundred.

Development of Inventions

Last year CPDL's activities in the development of inventions were applied almost wholly to arranging the provision and supplying of short term financing for inventors' services in the transfer and supplementing of "know-how" technology to licensees. Total expenditures were about \$11,800 of which most was repaid during the year or will be early in the next.

The merits of having more work done on selected inventions in order to clarify their utilities more fully to prospective licensees and of assisting more broadly in the transfers of the new technologies to licensees were studied at length.

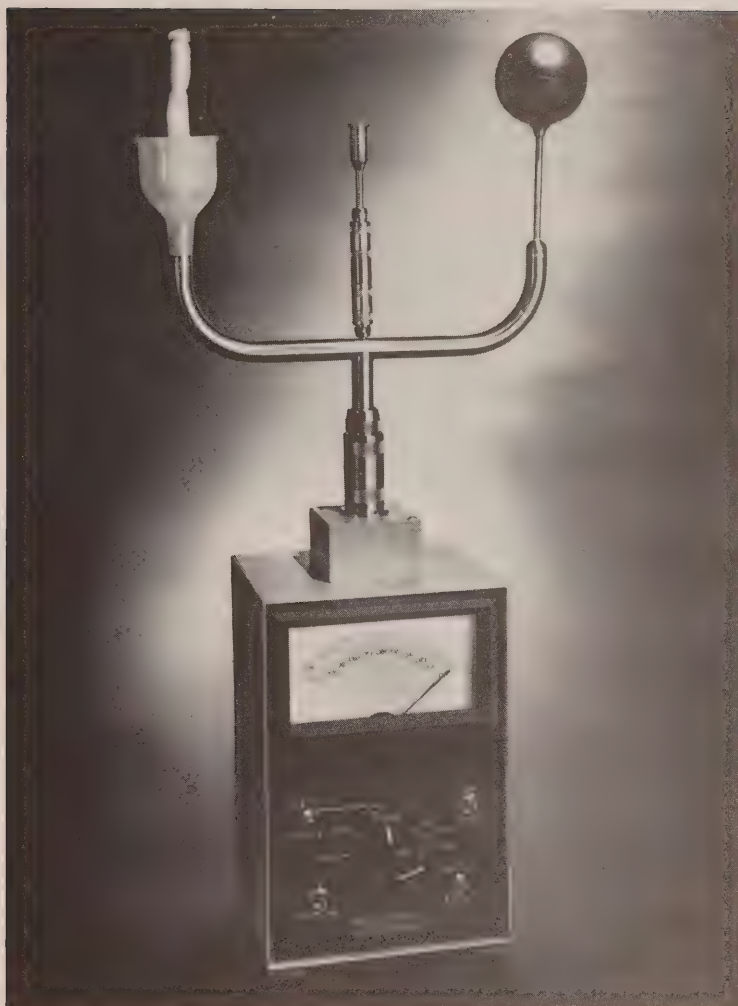
Licensing of Inventions

Licensing activity comprised 26 new licensings entailing 33 inventions. This compares with 45 new license agreements involving 54 inventions the previous year. There was a carry-over of 4 licensings which had been largely negotiated during 1972-73. Last year ended with 14 licensings similarly well along in preparation and approval.

No clear reason was discernable for the sharp decline in licensings from previous years. The enquiry rate remained high and the quality of the new inventions in our inventory appeared to be comparable with earlier years.

Among the licensings all but five were to companies in Canada. Three were to U.S. companies and two to Japanese. Three of the foreign licensings followed licensings to Canadian companies.

Five of the licensings were for "know-how".



Developed by the Department of National Defence, this heat stress meter has become important for monitoring the hazard to health of hot industrial environments.

Mis au point par le ministère de la Défense nationale, cet appareil de mesure des contraintes physiologiques imposées par la chaleur joue un rôle important dans la détermination des risques physiques en milieu industriel chaud.

One of the inventions was already licensed to eight other companies. Our first application for patent on it was in November 1959. Its patent expires in 1978. Two others were licensed to their third licensee, one being for a 1954 invention the other in 1958. In fact seven licensings were on inventions on which first filings for patents had been made in October 1965 or earlier. In these respects 1973-74 was an unusual year.

Several of the newly-licensed new inventions appear to possess at least above-average potential. They include two fire retardants for wood and paper products which came to CPDL from Environment Canada. Also two drug-type inventions, one being a process for extracting calcitonin and the other a vaccine against enteric disease in swine show promise of large scale use. These originated in the University of British Columbia and the University of Guelph respectively. An echoencephalograph for generalized quick assessment of brain damage, developed at the National Research Council of Canada, is also highly portable and, for example, could be used in ambulances en route to a hospital carrying victims of collisions etc. The Canada Department of Agriculture's method of entrapping the volatile essences of fruits for enhancing the appeal of various delicatessen items seems to have good promise as does the same Department's composition for prolonging the freshness of cut flowers, which is now beginning to appear on the market. Altogether 1973-74 was a good year in terms of the quality of the licensed inventions.

In recent past Reports we have noted a number of instances in which small Canadian companies have been formed to license and innovate a CPDL invention. During the past year the three most recent of such licensees i.e., for the TEA laser, the breakwater structure and the scanning electron microscope, have become strongly established with outstandingly excellent products for world-wide use. One has established two subsidiary companies in the United States.

FINANCIAL HIGHLIGHTS

The financial statements for the Corporation and the Report prepared by the Auditor-General for the fiscal year 1973-74 indicate that expenses exceeded income by \$48,246, even though net royalty revenue was increased over the previous year

by \$27,884. However, the over-all expenses of the Corporation were less than in the previous year, when the expenses exceeded income by \$101,606.

Development assistance continues to be made available on a regular recovery basis and a considerable portion of the development assistance which was made available several years ago is now being repaid by installments.

Although 1973-74 saw a general inflation of prices, a significant proportion of CPDL's 12.3% increase in gross royalty income was real growth.

The value of the CPDL investment portfolio has remained at \$675,813, while the value of the inventory of patents has risen to \$1,087,620.00.

The Canadian public continues to benefit from licensing in Canada those inventions which have potential in international markets. Royalty revenue received in respect of such inventions has risen considerably in the past year.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS

OFFICE OF THE AUDITOR GENERAL



BUREAU DE L'AUDITEUR GÉNÉRAL

Ottawa, May 27, 1974

The Honourable Charles M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Sir,

I have examined the balance sheet of Canadian Patents and Development Limited as at March 31, 1974 and the statement of income and expense for the year then ended. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In my opinion these financial statements present a true and fair view of the financial position of the Corporation as at March 31, 1974 and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

I further report that, in my opinion, proper books of account have been kept by the Corporation, the financial statements are in agreement therewith and the transactions that have come under my notice have been within the statutory powers of the Corporation.

Yours faithfully,

sgd J. J. Macdonell

Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1974
(with comparative figures as at March 31, 1973)

	<u>Assets</u>	
	<u>1974</u>	<u>1973</u>
Current assets:		
Cash including term deposits	\$ 34,506	\$ 26,852
Accounts receivable	94,076	76,606
Interest accrued on investments	<u>11,569</u>	<u>12,475</u>
Total current assets	140,151	115,933
Investments in bonds of, or guaranteed by, Canada, at cost (Market value, 1974, \$607,575; 1973, \$642,000)	675,813	675,813
Prepaid promotion expense	72,500	82,500
Patent rights at nominal value (Note 1)	1	1
Experimental equipment on loan to licensees, under shared development program, at nominal value (Note 2)	<u>1</u>	<u>1</u>
	<u>\$ 888,466</u>	<u>\$ 874,248</u>

The accompanying notes are an integral part of the financial statements.

Approved on behalf of the Board:

sgd. R.D.Hiscocks
.....
Director

sgd. B.G. Barrow
.....
Director

Liabilities

	<u>1974</u>	<u>1973</u>
Current liabilities:		
Accounts payable	\$ 247,567	\$ 181,008
Royalties paid in advance	<u> -- </u>	<u>4,095</u>
Total current liabilities	<u>247,567</u>	<u>185,103</u>
Equity of Canada:		
Capital Stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance at beginning of year	\$ 392,946	494,552
Deduct: Excess of expense over income for the year, per statement of income and expense	<u>48,246</u>	<u>101,606</u>
Balance at end of year	<u>344,700</u>	<u>392,946</u>
	<u>640,899</u>	<u>689,145</u>
	<u>\$ 888,466</u>	<u>\$ 874,248</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of May 27, 1974, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd. J. J. Macdonell

 Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED

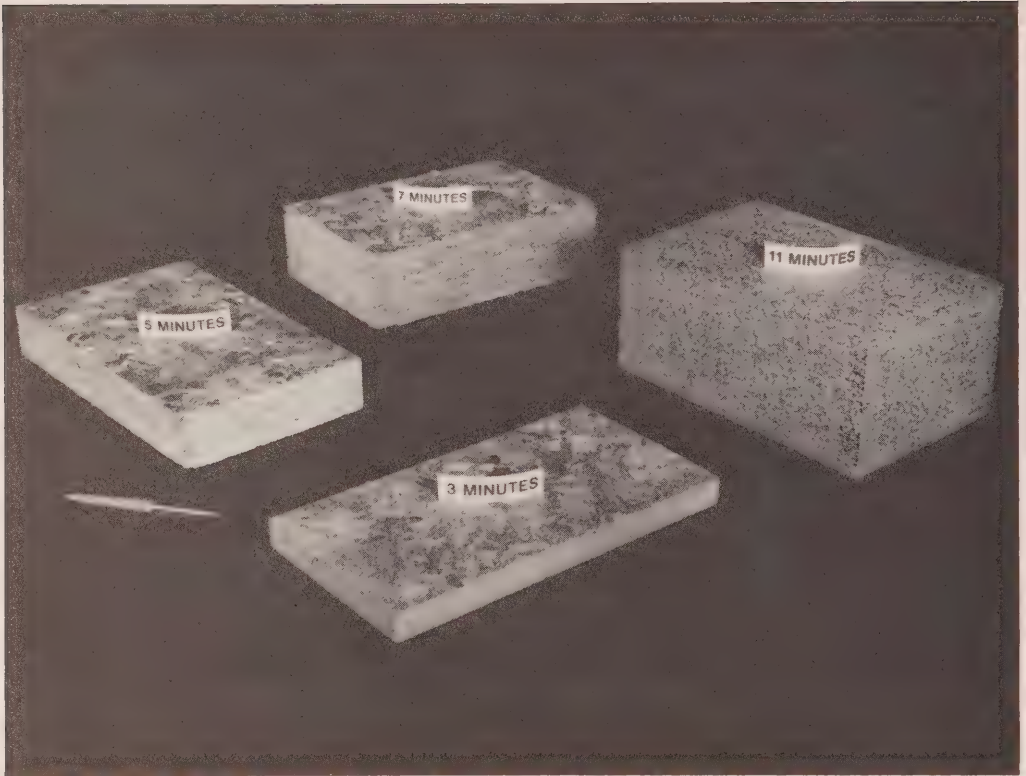
Statement of Income and Expense for the year ended March 31, 1974
(with comparative figures for the year ended March 31, 1973)

	<u>1974</u>	<u>1973</u>
Income:		
Royalties, licensing fees, etc.	\$ 656,596	\$ 584,823
Less: Awards to inventors	\$ 57,663	29,998
Payable to third parties in accordance with agreements	<u>165,500</u>	<u>149,276</u>
	<u>223,163</u>	<u>179,274</u>
	433,433	405,549
Interest earned	54,975	49,208
Service charges under agency agreements	28,189	19,918
Profit on sale of investments	--	177
Development assistance recovered	<u>51,912</u>	<u>15,154</u>
	568,509	490,006
Expense:		
Salaries (Note 3)	363,414	330,051
Patent agents fees and other patenting costs (Net)	93,981	107,658
Accommodation, equipment and other rentals	54,253	51,448
Development assistance	30,682	7,008
Office, supplies, printing, equipment and furnishings	19,555	20,172
Professional and special services	13,980	34,708
Travel	11,882	11,383
Services provided by National Research Council of Canada	10,025	9,612
Amortization of promotion expense	10,000	10,000
Communications	7,220	8,203
Miscellaneous	<u>1,763</u>	<u>1,369</u>
	<u>616,755</u>	<u>591,612</u>
Excess of expense over income	<u>\$ 48,246</u>	<u>\$ 101,606</u>

The accompanying notes are an integral part of the financial statements.

Notes to Financial Statements for the year ended March 31, 1974

1. At March 31, 1974 the Corporation had expended approximately \$1,100,000 on unexpired patent rights for inventions. In accordance with Corporation practice, expenditures relating to the acquisition and maintenance of patent rights are charged to expense as incurred and income, if any, derived from these patent rights is recorded when received or reported by the licensee.
2. The cost value of experimental equipment on loan at the year-end was \$123,500. Expenditure on experimental equipment is charged to expense as incurred and any proceeds on disposal are recorded as income in the year received.
3. Salaries for 1974 include remuneration of directors as directors \$4,000 and remuneration of officers \$50,700. The Company has twelve directors and five officers. Two officers are also directors.
4. Not reflected in the financial statements are royalties estimated at \$172,000, extending over a period of years, due under an agreement with a foreign licensee and in dispute because of differences between that licensee and a third party government and others using the invention.
5. A contingent liability of approximately \$36,000 exists with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.



Strong, economical particle-board using techniques developed in Environment Canada's Eastern Forest Products Laboratory soon to be in production by our licensee. Sections shown are one to five inches thick.

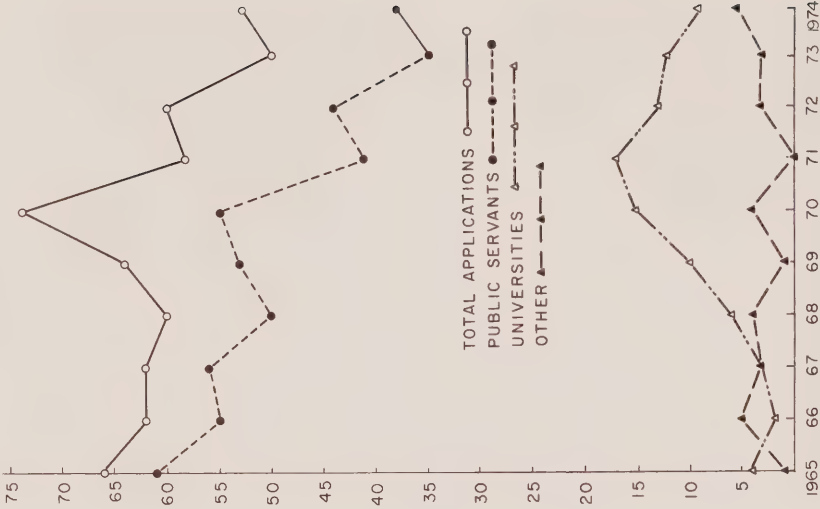
Panneau de particules, résistant et économique, mis au point à partir de techniques perfectionnées, au Laboratoire des produits forestiers de l'Est d'Environnement Canada. Notre détenteur de licence va incessamment fabriquer ce produit. Les sections illustrées ci-dessus ont une épaisseur variant entre 1 et 5 pouces.



The Microwave Attitude Sensing System (MASS), developed at the Communications Research Centre, Ottawa, helped a U.S. firm win an important space satellite contract in another country. Production of MASS hardware will be in Canada.

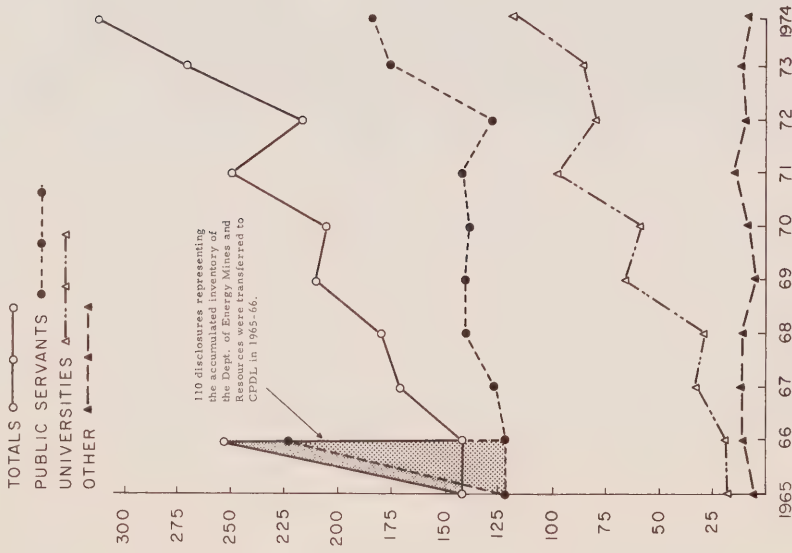
Le système détecteur d'attitude à micro-ondes (MASS) mis au point par le Centre de recherches sur les communications à Ottawa a permis à une compagnie américaine d'obtenir un important contrat pour la fabrication de satellites spatiaux. C'est le Canada qui produira le MASS.

DISCLOSURES RESULTING IN APPLICATIONS FOR PATENTS



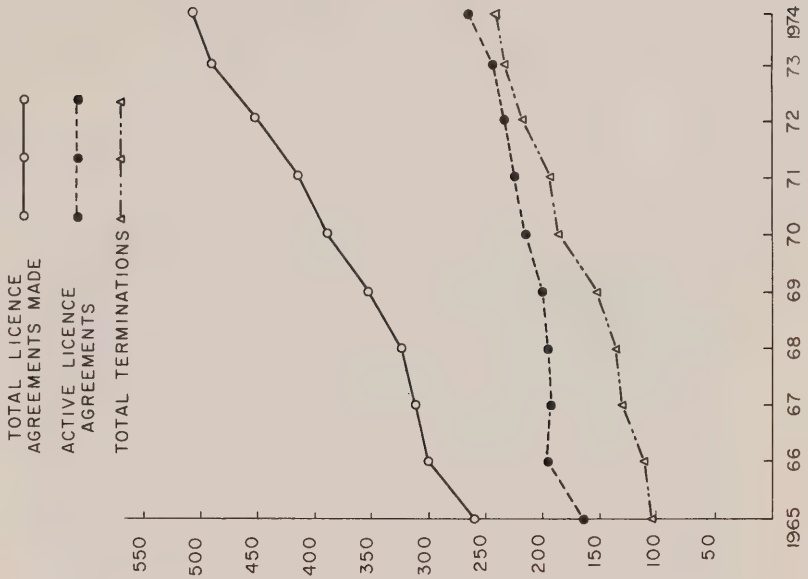
Note - Does not include filings for patents on inventions disclosed from the Department of National Defence. Such filings have already been made before disclosure.

DISCLOSURES OFFERED BY INVENTORS

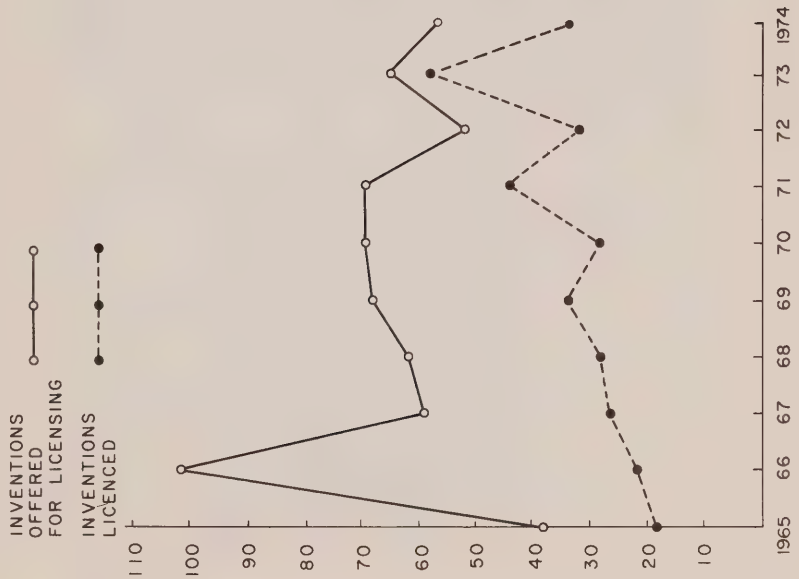


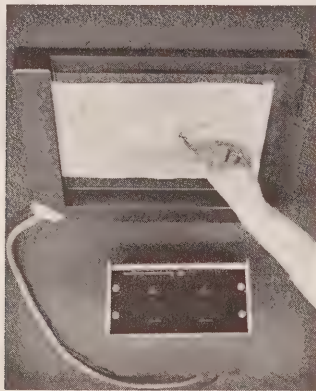
Note - Disclosures from the Department of National Defence are assessed and patent applied for before forwarding to CPDL.

CUMULATIVE LICENSING TOTALS



PROMOTION AND LICENSING





The Touch-Sensitive Digitizer initially developed by NRC for a computer-aided learning system and now also used for controlling air traffic is manufactured by Instronics Limited, Stittsville, Ontario.

Le convertisseur analogique-numérique thigmosensible (sensible au toucher) mis au point par le CNRC dans le cadre d'un programme d'enseignement à l'aide d'un ordinateur, utilisé pour le contrôle de la circulation aérienne, est maintenant fabriqué par Instronics Limited à Stittsville, Ontario.



Originated and developed with help from NRC the Zwarts Gage wave-height sensor can measure amplitudes to 15 meters and is being manufacture by George Kelk Ltd. Toronto.

Construit et mis au point avec la collaboration du CNRC, le détecteur indicateur de hauteur de vagues Zwarts peut mesurer des amplitudes atteignant 15 mètres et il est présentement fabriqué à Toronto par la compagnie George Kelk Ltd.

1. Au 31 mars 1974, la Corporation avait dépensé environ \$1,100,000 pour des droits de brevets non expirés. Conformément à la procédure habituelle, les dépenses relatives à l'acquisition ou au maintien des droits de brevets sont portées aux dépenses et le revenu éventuel des droits de brevets est enregistré lorsqu'il est reçu ou déclaré par le concessionnaire.

2. A la fin de l'année, la valeur du matériel expérimental emprunté se chiffrait à \$123,500. Les dépenses en matériel expérimental sont portées aux dépenses au fur et à mesure qu'elles sont engagées et tout produit provenant de la vente de ce matériel est porté au revenu de l'année.

3. Les traitements de l'année 1974 comprennent la rémunération des administrateurs à ce titre, soit \$4,000 et la rémunération des fonctionnaires qui s'est chiffrée à \$50,700. La Société compte douze administrateurs et cinq fonctionnaires. Deux fonctionnaires sont également administrateurs.

4. Les états financiers ne font pas état des redevances évaluées à \$172,000 qui s'échelonnent sur un certain nombre d'années et qui sont dues en vertu d'une convention avec un concessionnaire étranger. Ces redevances sont contestées à cause de certains différends qui existent entre le concessionnaire, un tiers gouvernement et d'autres personnes qui utilisent l'invention.

5. Il existe un passif imprévu d'environ \$36,000 provenant d'impôts qui n'ont pas été déduits à la source sur les redevances versées par un concessionnaire étranger.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

État des revenus et dépenses pour l'année terminée le 31 mars 1974
(Avec chiffres comparatifs pour l'année terminée le 31 mars 1973)

		1974	1973
Revenus:			
Redevances, droits de concession			
de brevets, etc.			
Moins: Primes versées aux			
inventeurs	\$ 57,663		29,998
Sommes à payer à des tiers			
conformément aux accords	165,500		149,276
		223,163	179,274
Intérêt gagné		433,433	405,549
Remboursements et commissions selon		54,975	49,208
des conventions de mandataire		28,189	19,918
Profit sur vente de placements		--	177
Recouvrement de frais d'aide au		51,912	15,154
développement		568,509	490,006
Dépenses:			
Traitements (Note 3)		363,414	330,051
Honoraires des agents de brevets		93,981	107,658
Installations, équipement et autres			
frais de location		54,253	51,448
Frais d'aide au développement		30,682	7,008
Papeterie, fournitures, impression,		19,555	20,172
équipement et mobilier de bureau		13,980	34,708
Services spéciaux et professionnels		11,882	11,383
Frais de voyage			
Services fournis par le Conseil		10,025	9,612
national de recherches			
Amortissement des frais de lancement		10,000	10,000
Communications		7,220	8,203
Divers		1,763	1,369
		616,755	591,612
Excédent des dépenses sur les revenus	\$ 48,246		\$ 101,606

Les notes ci-jointes font partie intégrante des états financiers.

L'Auditeur général du Canada
signé J. J. Macdonnell

J'ai examiné le bilan ci-dessus et l'état des revenus et dépenses s'y
attéchant et le 27 mai 1974, j'en ai fait rapport au Président du Comité des
recherches scientifiques et industrielles du Conseil privé.

Passif			
1974	1973	Exigibilités:	
		Comptes à payer	\$ 181,008
		Redevances payées d'avance	4,095
247,567	185,103	Total du passif exigible	
		Avoir de l'Etat:	
		Capital-actions:	
		Autorisé - 10,000 actions sans	
		valeur nominale	
		Emis - 5,000 actions,	
		entièrement libérées	296,199
		Excédent:	
		Solde au début de l'année	\$ 392,946
		A déduire: Excédent des	
		dépenses sur les revenus	
		pour l'année d'après l'état	48,246
		des revenus et dépenses	101,606
344,700	392,946	Solde à la fin de l'année	
640,899	689,145		
\$ 888,466	\$ 874,248		

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITEE
(Constituée en vertu de la Loi sur les Corporations canadiennes)

Bilan au 31 mars 1974
(avec chiffres comparatifs au 31 mars 1973)

Actif

	1974	1973
Disponibilités		
Encaisse inclue dépôts à termes	\$ 34,506	\$ 26,852
Comptes à recevoir	94,076	76,606
Intérêt couru sur placements	<u>11,569</u>	<u>12,475</u>
Total de l'actif disponible	140,151	115,933
Placements sur obligations émises ou garanties par le Canada, au prix coûtant, (valeur boursière, 1974, \$607,575; 1973, \$642,000)	675,813	675,813
Frais de lancement payés d'avance	72,500	82,500
Les droits de brevets, valeur nominale (Note 1)	1	1
Équipement expérimental prêté à des concessionnaires, en vertu du programme de développement à frais partagés, valeur nominale (Note 2)	<u>1</u>	<u>1</u>
	\$ 888,466	\$ 874,248

Les notes ci-jointes font partie intégrante des états financiers.

Approuvé au nom du Conseil d'administration:

Administrateur
signé R. D. Hiscocks
Administrateur
signé B. G. Barrow



Ottawa, le 27 mai 1974

L'honorable Charles M. Drury,
Président du comité des recherches
scientifiques et industrielles du Conseil privé,
Ottawa.

Monsieur le Président,

J'ai examiné les comptes et les états financiers de la Société canadienne des brevets et d'exploitation limitée pour l'exercice se terminant le 31 mars 1974. J'ai procédé à un examen d'ensemble des méthodes de comptabilité ainsi qu'à un sondage des livres comptables et d'autres pièces jugées nécessaires en la circonstance.

A mon avis, le bilan est un exposé juste et fidèle de la situation financière de la Société au 31 mars 1974 et des résultats de ses opérations financières pour l'année écoulée. Les états financiers ont été établis conformément à des méthodes de comptabilité généralement admises et sur une base comparable à celle de l'année précédente.

En outre, je désire souligner qu'à mon avis, la Société a tenu fidèlement ses livres, que les états financiers étaient conformes à ces livres et que les opérations financières de la Société qui ont été portées à ma connaissance étaient de la compétence statutaire de la Société.

Veuillez agréer, Monsieur le Président, l'expression de mes sentiments les meilleurs.

L'Auditeur général du Canada
signé J. J. Macdonell

RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

été une augmentation réelle.

Les investissements de la SCBE sont demeurés stables à \$675, 813 tandis que la valeur des brevets détenus a augmenté et se chiffre maintenant à \$1, 087, 620.

Le public canadien continue à profiter de la cession de licences canadiennes pour les inventions qui ont un grand potentiel sur les marchés internationaux. Les redevances perçues pour ce type d'inventions se sont accrues considérablement au cours de la dernière année.

En outre, le Conseil national de recherches du Canada a perfectionné un écho-encéphalogramme qui permet de déceler très rapidement les lésions du cerveau. Cet appareil portatif peut par exemple être employé à bord d'une ambulance transportant vers l'hôpital un blessé victime d'une collision. Le ministère de l'Agriculture a mis au point une méthode qui permet de retenir les essences très volatiles des fruits pour rehausser la saveur de certaines confiseries et qui semble avoir de bonne chances de succès. Le Ministère a aussi mis au point un produit qui permet de conserver les fleurs plus longtemps et qui commence à apparaître sur le marché. En somme, l'année 1973-74 a été une très bonne année du point de vue de la qualité des inventions.

Dans les derniers rapports, nous avons mentionné qu'un certain nombre de petites compagnies canadiennes avaient été formées en vue d'obtenir des licences pour innover certaines inventions de la SCBE. Au cours de la dernière année, les trois compagnies formées à cette fin, c'est-à-dire celles qui s'occupent de la mise en marché du laser TFA, de l'estacade et du microscope électronique à balayage se sont solidement implantées et vendent des produits de très haute qualité dans le monde entier. L'une de celles-ci a même ouvert deux filiales aux États-Unis.

ASPECTS FINANCIERS

Les états financiers de la Société et le rapport de l'Auditeur général pour l'année financière 1973-74 montrent que nos dépenses excédaient nos recettes de \$48,246 bien que les revenus provenant des redevances aient augmenté de \$27,884 par rapport à l'année précédente. Toutefois, les dépenses totales de la Société ont été inférieures à celles de l'année précédente, en effet, elles excédaient alors les revenus de \$101,606.

La Société continue d'accorder des subventions pour la mise au point des inventions, mais ces sommes sont remboursables et grand nombre de celles versées il y a quelques années sont maintenant remboursées par versements.

Bien qu'il y ait eu une grande poussée inflationniste au cours de l'année 1973-74, une part importante de l'augmentation des redevances perçues par la SCBE qui s'est chiffrée à 12.3% a

dant à 33 inventions. L'année précédente nous avions accordé 45 licences pour 54 inventions. Il y a eu un report de 4 licences qui avaient été surtout négociées en 1972-73. À la fin de l'an dernier, il y avait 14 licences en voie de préparation et qui devaient être accordées sous peu.

Nous n'avons trouvé aucune raison précise pour expliquer la baisse importante des demandes de licence par rapport aux années précédentes. Le nombre de demandes de renseignements est demeuré assez élevé et la qualité des inventions dans notre répertoire nous a semblé comparable à celle des années précédentes.

De toutes les licences accordées, seulement cinq ont été octroyées à des compagnies étrangères, en effet, trois licences ont été accordées à des compagnies américaines et deux à des entreprises japonaises. Trois de ces licences ont été cédées à l'étranger après avoir été délivrées au Canada.

Enfin, on a accordé cinq licences pour l'ingéniosité.

Dans le cas d'une invention particulière, on avait déjà accordé une licence à huit autres compagnies. La première demande de brevet pour cette invention avait été déposée en novembre 1959. Ce brevet arrivera à échéance en 1978. Dans deux autres cas, on a accordé des licences pour la troisième fois, l'une pour une invention remontant à 1954 et l'autre à 1958. En réalité on a accordé sept licences à des inventions pour lesquelles les demandes de brevets avaient été déposées antérieurement à octobre 1965. À ce sujet, l'année 1973-74 a été une année exceptionnelle.

Quelques unes des nouvelles inventions semblent avoir des possibilités supérieures à la moyenne. Parmi celles-ci, mentionnons deux produits servant à l'ignifugation du bois et du papier qui ont été déposées auprès de la SCBE par Environnement Canada. Notons aussi deux inventions dans le domaine médico-pharmaceutique, l'une étant un procédé d'extraction de la calcitonine et l'autre un vaccin contre les maladies entériques chez les porcs. Ces deux produits auront probablement des usages très répandus. Ces inventions ont été respectivement mises au point à l'université de la Colombie-Britannique et à l'université Guelph.

Habituellement, on ne commence pas à promouvoir une invention avant que la première demande de brevet n'ait été déposée. Cependant, dans certains cas, la SCBE peut dévoiler confidentiellement à un détenteur de licences éventuel les détails d'une invention avant que le brevet ne soit délivré.

Les compagnies auxquelles des contrats sont adjugés ont souvent le premier droit de refus lorsqu'il s'agit d'accorder les licences pour des inventions qui ont été découvertes grâce à des subventions de recherche ou à des contrats du ministère des Approvisionnements et Services ou d'autres ministères et organismes fédéraux.

Lorsqu'il s'agit de promouvoir de nouvelles inventions, la SCBE s'efforce d'accorder des licences aux compagnies qui sont établies au Canada. La SCBE est aussi pleinement consciente de l'objectif du gouvernement fédéral qui consiste à favoriser une répartition plus uniforme de l'industrie au Canada. Toutefois, il semble qu'au Canada, le nombre de compagnies intéressées à demander des licences pour de nouvelles inventions et à exploiter celles-ci en vue d'une production commerciale soit encore inférieur à cinq cent.

Le développement des inventions

Au cours de la dernière année, les activités de la SCBE dans le domaine du développement des inventions ont surtout consisté à organiser le financement à court terme des services des inventeurs aux détenteurs de licences pour le transfert et l'amélioration de la technologie. Les dépenses totales se sont chiffrées à \$11,800 et une grande partie de cette somme a déjà été remboursée ou le sera au début de l'an prochain.

On a étudié en profondeur les avantages qu'il y avait à effectuer de plus amples travaux sur certaines inventions particulières afin d'en déterminer plus précisément les usages pour les détenteurs éventuels de licences et de mieux contribuer au transfert des nouvelles technologies aux détenteurs de licences.

La cession de licences

Nous avons accordé 26 nouvelles licences correspondan-

première demande de brevet de même qu'un autre montant de cinquante dollars si sa demande de brevet est acceptée.

Les chiffres de 1973-74 relativement aux demandes de brevets ne permettent pas de tirer de conclusions sur les effets de cette motivation accrue pour les inventeurs.

PROMOTION, DEVELOPPEMENT ET ACCORDS DE LICENCES

Promotion des inventions

Le répertoire de la SCBE se compose principalement de nouvelles inventions peu perfectionnées, bien qu'un bon nombre ait donné lieu à des travaux subséquents ou encore fait preuve d'une ingéniosité remarquable. Certaines inventions ne sont en réalité que des techniques fort ingénieuses.

L'an dernier le service de lancement et d'exploitation de la SCBE a reçu 79 nouvelles inventions, dont 17 étaient fondées exclusivement sur la conception et l'ingéniosité. Nous en avons supprimé 30 du répertoire et, à la fin de l'année, il en restait donc 764 qui pouvaient faire l'objet d'une licence.

Afin de lancer les inventions, la SCBE entre directement en contact avec les sociétés, fait des présentations lors des expositions commerciales et industrielles, aide les ministères à promouvoir et à faire connaître leurs inventions, lance certaines inventions choisies en publiant des annonces dans un grand nombre de revues commerciales pertinentes, fait appel aux services des entreprises qui se spécialisent dans la promotion des inventions, invite les compagnies à visiter ses bureaux et ses salles de présentation, initiative qui se révèle très profitable pour les compagnies qui acceptent l'invitation et, enfin, publie, met à jour et distribue gratuitement le Catalogue des inventions à plus de 3,000 personnes et sociétés. En outre, la SCBE bénéficie beaucoup d'une publicité gratuite des media d'information.

Comme toujours, le type le plus fréquent de demandes d'évaluation a été pour des instruments de mesures, d'essais, de commande, etc. La répartition des inventions dans les principales disciplines techniques était assez uniforme. Il y a eu un nombre considérable de demandes pour des inventions visant à résoudre certains problèmes de l'environnement.

Prises de brevets

L'année dernière, la SCBE a déposé des demandes de brevet pour 53 inventions. On peut comparer ce chiffre à 50 en 1972-73 et à une moyenne annuelle de 60 durant les cinq années précédentes. Sur les 53 demandes de brevet faites l'année dernière, 46 ont été présentées par le service des brevets de la SCBE et les autres par différents agents de brevets canadiens. En outre la SCBE a fait 144 demandes dans d'autres pays, chiffre à comparer à 103 l'année précédente; elle a aussi suivi environ 400 demandes antérieures. Au cours des années, la SCBE a fait des demandes de brevet dans 68 pays différents.

Au 31 mars 1974, le service des brevets avait, soit directement, soit par l'intermédiaire d'agents de brevet, accumulé les brevets correspondant à 1317 inventions.

Les inventeurs

Comme les quatre dernières années, notre corpora-tion a continué l'année dernière à décerner l'insigne enregistré de "l'inventeur" et les certificats officiels correspondants aux inventeurs qui ont obtenu un brevet ayant donné lieu à une cession de licence. L'année dernière nous avons présenté notre insigne à 46 inventeurs. Actuellement, notre total d'inventeurs reconnus s'élève à 664.

L'année 1973-74 fut la première année complète pendant laquelle la nouvelle échelle de redevances versées aux inventeurs-fonctionnaires fut en vigueur en vertu du Règlement régissant les inventions des fonctionnaires publics. La nouvelle échelle permet à l'inventeur de toucher 15% des redevances brutes perçues pour son invention au cours de l'année financière. En outre, le ministère ou l'agence dont relève l'inventeur peut verser à celui-ci la somme de cinquante dollars lors de sa

DEMANDES ET PRISES DE BREVETS; INVENTEURS

la SCBE pour agir à titre d'agent consultatif et administratif. À ce chapitre, l'année dernière, les types des sources de demandes de la SCBE ont commencé à inclure les compagnies canadiennes qui avaient reçu des contrats de développement.

Demandes d'évaluation de brevets d'invention

Durant l'année, nous avons reçu 312 demandes le la part d'inventeurs qui croyaient que leurs inventions étaient brevetables. On peut comparer ce chiffre au total de chacune des dix années précédentes, soit à 270, 216, 249, 206, 208, 172, 158, 134 et 133.

Les fonctionnaires sont à l'origine de 187 demandes l'année dernière comparativement à 174 en 1972-73. Dans le cas des universités, les demandes se chiffraient à 118, soit une augmentation par rapport à l'année précédente alors qu'elles s'élevaient à 85. Les organismes provinciaux de recherches sont à l'origine de 2 tandis que les détenteurs de licences de la SCBE en ont soumis quatre.

Sur les 187 demandes d'évaluation de brevets reçues des ministères et organismes fédéraux en 1973-74, 45(22 en 1972-73) sont venues de l'Énergie atomique du Canada limitée; 40 (30) du ministère de la Défense nationale, 37 (47) du Conseil national de recherches du Canada, 22 (33) du ministère de l'Environnement; 18 (10) du ministère des Communications, 14 (19) du ministère de l'Énergie, des Mines et des Ressources, 6 (5) du ministère de l'Agriculture; 4 (1) du ministère de la Santé nationale et du Bien-être social et 1 (0) du ministère des Postes. Dix-neuf universités ont envoyé des demandes d'évaluation de brevets. Une université a fait parvenir 14 demandes, ce qui représente le nombre le plus élevé pour une université, tandis que treize universités en ont soumis quatre ou plus.

Bien des organismes du gouvernement fédéral ont changé de nom depuis 1948. Au fil des années, la SCBE a reçu des inventions provenant de 31 ministères et organismes différents. L'année dernière nous avons reçu des demandes d'évaluation de brevets de 9 ministères et organismes.

Les pouvoirs accordés dans le cadre de la Loi régissant l'exploitation des sociétés d'Etat (maintenant des compagnies canadiennes) ont permis à la SCBE d'offrir ses services et de passer des conventions avec des organismes en dehors du gouvernement fédéral pour régler les questions d'inventions.

Universités

La première de ces conventions a été passée avec l'Université de la Colombie Britannique à la fin de 1948 et la deuxième avec l'École Polytechnique au début de 1949. Au 31 mars 1974, la SCBE avait établi des conventions avec 29 universités et collèges et plusieurs autres étaient à l'étude.

Organismes provinciaux de recherche

En 1951, le Conseil de recherche de la Saskatchewan est devenu le premier organisme de recherches provincial à signer un contrat avec la SCBE. Au 31 mars 1974, nous avions signé des conventions avec six organismes de recherches provinciales.

Autres organismes

La SCBE a signé des conventions avec cinq autres organismes comme l'Institut Canadien du Cancer et la Commission des Saratorms du Manitoba qui reçoivent des fonds publics pour les aider dans leurs recherches.

Compagnies

Au cours de l'année 1971-72, des ministères et organismes fédéraux ont commencé à inclure dans certains contrats et dans certaines subventions accordés aux universités et à l'industrie, des clauses donnant à la Couronne le droit de priorité sur les inventions faites dans le cadre de ces contrats et nommant

OBJET

Les fonctions de la SCBE consistent à rendre plus accessible au public, par l'intermédiaire de l'industrie, les produits licenciables mis au point grâce à des programmes de recherche ou de développement financés par l'Etat.

CHAMP D'ACTION

La SCBE étudie les inventions qui lui sont soumises en vue de déterminer s'il y a matière à brevet et quels sont les avantages commerciaux, ou autres, que le public pourrait en tirer; elle dépose dans divers pays des demandes de brevets pour les inventions jugées brevetables, développe certaines inventions seule ou avec l'aide d'autres organismes, afin d'en faire ressortir l'utilité ou de les rendre plus alléchantes pour les licenciés éventuels; elle lance des inventions et accorde des licences d'exploitation à l'industrie, perçoit les redevances qui en découlent et se sert de ces sommes pour couvrir ses frais d'exploitation; elle utilise ses fonds pour exécuter sa mission définie ci-dessus.

ORIGINES DES INVENTIONS

Ministères fédéraux et agences

La SCBE a été créée en 1947 par le Conseil National de Recherches du Canada (CNRC) du fait, après la Deuxième Guerre mondiale, d'une accumulation d'inventions brevetables provenant pour la plupart du CNRC et d'autres centres de recherches financés par le gouvernement. En 1948, la SCBE a commencé à travailler sur des inventions d'origine fédérale autres que celles du CNRC et, tout d'abord, sur les inventions provenant du Ministère de la reconstruction et des approvisionnements. La promulgation, en 1954, par le gouvernement fédéral de la Loi sur les inventions des Fonctionnaires Publics a eu pour effet de faire de la SCBE le principal organisme chargé de prendre des brevets et d'accorder des licences pour des inventions appartenant au gouvernement canadien.

DIRECTION	
Président	R. D. Hiscocks
Vice-président	B. G. Barrow
Directeur général	C. L. Annis
Secrétaire	F. R. Charles
Trésorier	W. D. Gordon
SERVICES	
Développement et Promotion	J. R. Johnson, Chef (retraité 29 déc. 73)
	K. G. Lund, Chef
	R. A. Pacaud
	P. A. Miller
	K. F. Crowe
Brevets	J. R. Hughes, Chef
	A. A. Thomson
	F. W. Lemon
	R. G. Bitner
	E. Rymek
Contrats et licences	W. D. Gordon, Chef
Administration	L. Lipke, Chef
Comptabilité	H. Scharf
CONSEILLER JURIDIQUE	J. F. Leman
VERIFICATEUR	Auditeur général du Canada
BANQUE	Banque Canadienne Impériale de Commerce
SIEGE SOCIAL	275, rue Slater Ottawa, Ontario, K1A 0R3

ADMINISTRATEURS W.M. ARMSTRONG

Vice-recteur, Université de la
Colombie Britannique

W.M. AULD

Président, Bristol Aerospace (1968) Ltd

B.G. BARROW

Premier sous-ministre adjoint - Industrie
Ministère de l'Industrie et du commerce

W.J. CHEESMAN

Président, Canadian Westinghouse Co. Ltd

P.R. GENDRON

Président, Pulp and Paper Research
Institute of Canada

W.F. GRAYDON

Président, Division du génie chimique et
chimie appliquée, Université de Toronto

R.D. HISCOCKS

Vice-président (Affaires scientifiques),
Conseil national de recherches du Canada

D.N. KENDALL

Président, Kenting Limited

J.C. PANISSET

Directeur de recherche
Institut de bio-endocrinologie, inc

W.G. SCHNEIDER

Président, Conseil national de recherches
du Canada

J.J. SHEPHERD

Président, Leigh Instruments Limited

S. WAGNER

Directeur général, Sciences et technologie,
Ministère de l'Industrie et du commerce

I N D E X

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CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 14 juin 1974

L'honorable C.M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

Monsieur le Ministre,

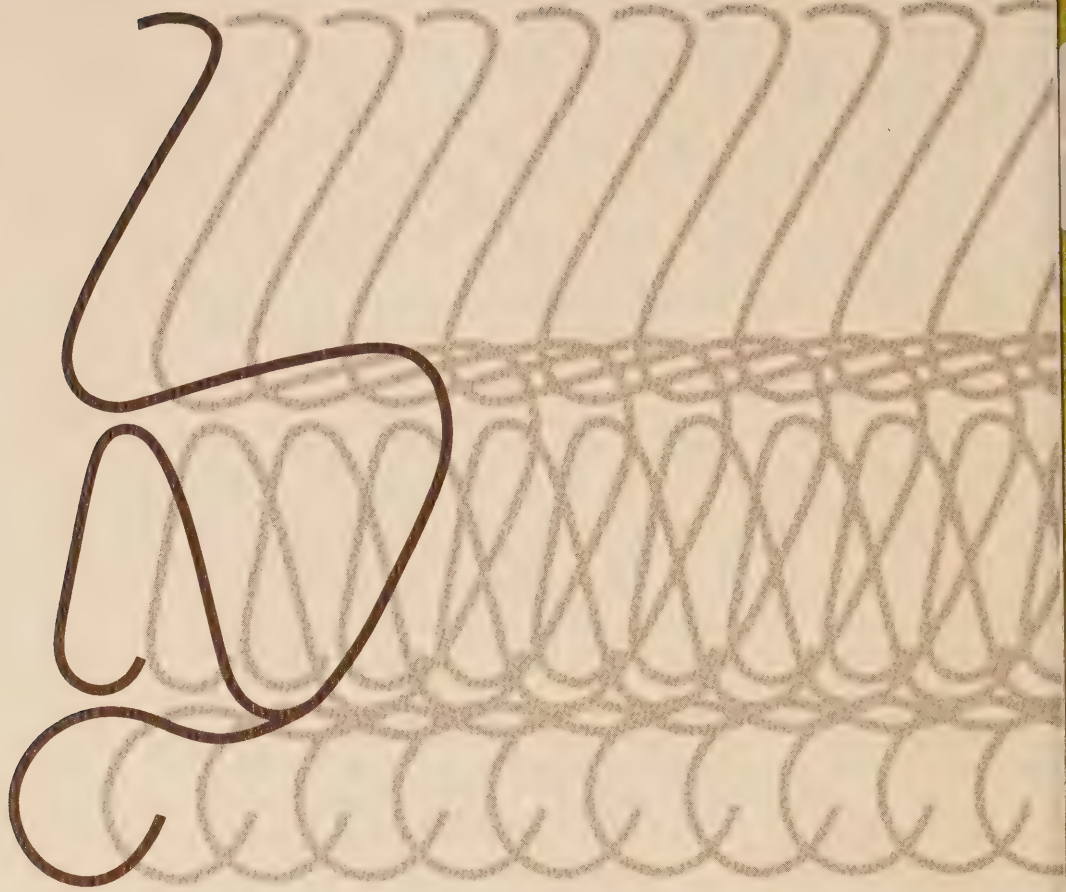
Conformément à l'article 75(3) de la Loi sur l'administration financière, j'ai l'honneur de vous présenter, au nom du Conseil d'administration, le Rapport annuel de la Société canadienne des brevets et d'exploitation, limitée, pour l'exercice qui s'est terminé le 31 mars 1974, de même que l'état des finances et le rapport de l'Auditeur général du Canada.

En tant que Président du Conseil du Trésor vous avez approuvé notre budget de fonctionnement pour l'année fiscale 1974-75.

Veuillez agréer, Monsieur, je vous prie, l'expression de mes sentiments les meilleurs.

R. D. Hiscocks,
Président.

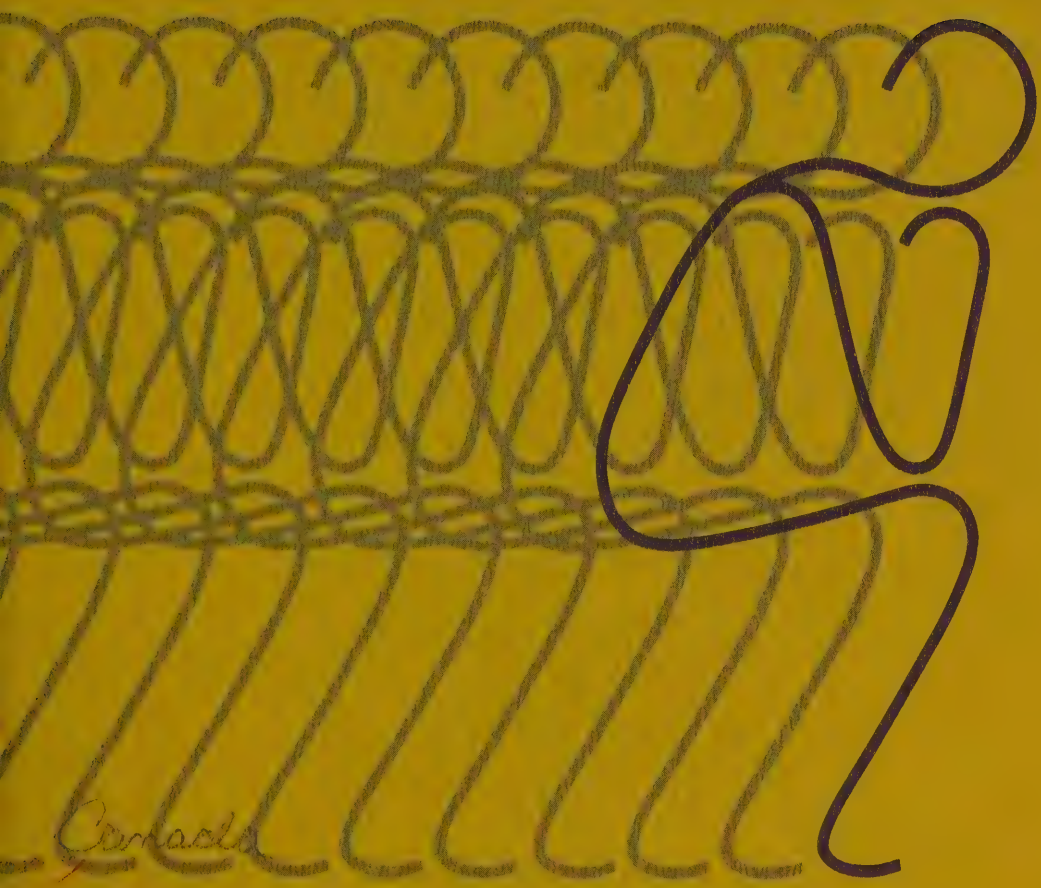
RAPPORT ANNUEL
1974
SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE
(S C B E)



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ANNUAL REPORT
1975

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 3 July 1975

The Honourable C.M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Dear Mr. Drury,

In accordance with Section 75 (3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1974-75. The Company's Financial Statement and the Report of the Auditor General are included.

Yours sincerely,

R.D. Hiscocks,
President.

DIRECTORS

W.M. ARMSTRONG

Chairman, Universities Council of British
Columbia

W.M. AULD

President, Bristol Aerospace Limited

B.G. BARROW

Senior Assistant Deputy Minister - Industry
Department of Industry, Trade and CommerceW.J. CHEESMAN ¹

President, Westinghouse Canada Limited

P.R. GENDRON

President, Pulp and Paper Research Institute
of Canada

W.F. GRAYDON

Chairman, Department of Chemical
Engineering and Applied Chemistry,
University of Toronto

R.D. HISCOCKS

Vice-President (Industry), National Research
Council of Canada

D.N. KENDALL

Vice-Chairman, Hermes Electronics Limited

J.C. PANISSET

Director of Research, Institute of
Bio-Endocrinology, Inc.

W.G. SCHNEIDER

President, National Research Council of
Canada

J.J. SHEPHERD

President, Leigh Instruments Limited

S. WAGNER

General Director, Science and Technology,
Department of Industry, Trade and Commerce¹ Deceased 28 Aug. 74

OFFICERS

President	R.D. Hiscocks
Vice President	B.G. Barrow
General Manager	C.L. Annis ¹ W.M. Hill ²
Secretary	F.R. Charles
Treasurer	W.D. Gordon

BRANCHES

Development and Promotion	K.G. Lund, Chief R.A. Pacaud P.A. Miller K.F. Crowe M.T. DaSilva
Patents	J.R. Hughes, Chief A.A. Thomson F.W. Lemon R.G. Bitner E. Rymek
Contracts and Licensing	W.D. Gordon, Chief
Administration	L. Lipke, Chief
Accounts	H. Scharf

LEGAL ADVISER

J.F. Leman
Department of Justice

AUDITOR

The Auditor General of Canada

BANKERS

The Canadian Imperial Bank of
Commerce

HEAD OFFICE

275 Slater Street
Ottawa, Ontario. K1A 0R3

¹ Retired 30 Dec. 74

² Appointed 1 Jan. 75

Canadian Patents and Development Limited (CPDL) was established to make available to the public, through licensing arrangements with industry, the industrial and intellectual property which results from publicly funded research and development.

Activities

CPDL receives ideas and inventions from public servants in all departments of the federal government and from the professional staff and employees of universities, Crown corporations and provincial research institutions. The ideas and inventions are first assessed for patentability and commercial use. Patent applications are filed in various countries in respect of those which are considered commercially exploitable and patentable. Some which are not patentable may be licensed as know-how independently, or together with patents. The license fees and royalties paid under license agreements are used to cover CPDL operating expenses.

Sources of Invention

CPDL was originally established in 1947 to handle patentable material of the National Research Council of Canada (NRC) and other government-financed research. The passage of the Public Servants Inventions Act in 1954 made CPDL the prime patenting and licensing agency for inventions belonging to the Canadian government.

CPDL has, in addition, the powers under the Canada Corporations Act to enter into agreements for handling the inventions of universities, provincial research organizations, and other publicly financed institutes.

Disclosures

CPDL received 279 new disclosures from all its sources during the year; this was 33 less than last year. Government departments and agencies provided 192 of the total disclosures, while of the remaining, 85 were received from universities, two from provincial research organizations and one from an institute.

Patenting

CPDL filed 61 initial patent applications and 151 convention applications last year. Of the initial filings, 80% were prepared and filed by CPDL patent officers, as were 88% of the convention applications.

Inventors

CPDL has continued its policy of giving recognition to inventors by presenting them with lapel pins bearing replicas of the CPDL registered symbol "The Inventor". The group of inventors so recognized has now reached 705, with 41 of that number being added this past year.

Promotion of Inventions

During the last year the CPDL promotion staff accepted 55 new inventions for exploitation, of which 20 comprised know-how not protected by patent applications. 32 license agreements were completed during the year, 28 of them involving a total of 51 inventions for which patents had issued or patent applications had been filed this year or in previous years. The remainder comprised a computer program and the design and know-how for three instruments. 34 cases were no longer exploitable because they had become obsolete or their patents had expired.

Patents covering several of the more profitable inventions in the CPDL inventory expired in 1974. However, the resulting loss of revenue should be offset by increased revenue anticipated from the larger number of licenses granted in recent years, particularly in respect of some of the newer cases, the prospects of which appear to be good.

In particular, more off-shore oil storage structures of the Ekofisk type, which uses the NRC perforated breakwater invention, will be built in Europe. One unit is under construction at present, another is projected.

A licensee is about to launch a new product developed by the Department of Agriculture — frozen eggs in free-flowing "popcorn like" pellet form — which offers many advantages to

the industrial user. The potential volume of the product is large.

It is expected that the high performance mica reinforced composite invention, made at the University of Toronto, will be further developed to take advantage of the large potential market for this product.

CPDL recently licensed a process, developed by Eldorado Nuclear Ltd., for extracting cobalt and nickel from their ores, to a Japanese company which is constructing a new smelter to use the technique.

An interesting new development is an ultra bright arc light from the Physics Department at the University of British Columbia. CPDL has agreed to license this invention to a new Vancouver company for development and exploitation. Small lamps of this type have operated at more than 200 Kilowatts. It is possible that, when fully developed, one such lamp could adequately illuminate a football stadium.

CPDL applied for a patent on a process conceived at the NRC for extracting sand and clay from Tar Sands by an application of the NRC Spherical Agglomeration Technique. The invention has been licensed to an Alberta company that intends to set up a pilot plant operation to develop a full-scale technique with the objective of sublicensing the process and providing equipment and expertise to extraction companies.

CPDL will intensify research into marketing and aim at promoting world interest in Canadian inventions. To accomplish this, an exploratory investigation of the European market will be carried out in July and August of 1975 by exposing a select group of inventions and patents to industry in West Germany, Switzerland and France.

CPDL will also send out to potential licensees several newsletters describing the more interesting inventions and outlining anticipated applications and markets.

In February 1976, CPDL will have a display and personnel at The World Technology Fair, in Chicago. This will

be the largest international technological show to date and will include inventions from France, Hungary, Romania, United Kingdom, Japan, the Soviet Union and the United States.

Drug Screening

In 1974 a new project was initiated, one which encourages Canadian universities to send compounds developed in their laboratories to CPDL for evaluation; if the compound, after basic testing, shows pharmaceutical activity, CPDL then considers the patentability and breadth of coverage which would permit the licensing of the compound to the pharmaceutical industry for exploitation. It is anticipated that a portion of the royalties generated will be used for additional research and development. The possible end result being the enhancement of the pharmaceutical industry in Canada.

Financial Highlights

The CPDL financial statements for the financial year 1974-75 and the report prepared by the Auditor General reveal that the expenses exceeded income by \$218,000. Included as an expense was the write-off of \$72,500 of prepaid promotion expenses as authorized by the Directors at the Annual Meeting in 1974.

There was one contract for development assistance which amounted to \$25,000. Under the terms of the contract, the full amount will be repaid in 1975.

The value of the CPDL investment portfolio has been reduced by the excess of expense over income of recent years and now is valued at \$524,062.

CPDL continues to play an important role in the transfer of technology from government and university laboratories to industry. However royalty growth has not kept pace with operating costs and in the coming year every effort will be made to effect economies and to increase royalty income.

Staff

The CPDL staff of 26 is comprised of individuals whose abilities are specifically suited to working with inventions, inventors, patents, and industry. In providing a specialized service, the staff have no equals in the federal government, and without the whole-hearted contributions of whom, individually and collectively, CPDL would not have maintained its record of progress.

In December 1974 Air Marshal C. L. Annis retired from his duties as General Manager. He came to CPDL in 1966 and during the ensuing years his skill and judgement were thoroughly tested as he guided CPDL through the general decline of economic conditions in the late 60's and early 70's. Everyone wishes him well in his retirement.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS



AUDITOR GENERAL OF CANADA

AUDITEUR GÉNÉRAL DU CANADA

Ottawa, May 15, 1975

The Honourable Charles M. Drury,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Dear Mr. Drury,

I have examined the balance sheet of Canadian Patents and Development Limited as at March 31, 1975 and the statement of income and expense for the year then ended. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In my opinion these financial statements give a true and fair view of the financial position of the Corporation as at March 31, 1975 and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

I further report that, in my opinion, proper books of account have been kept by the Corporation, the financial statements are in agreement therewith and the transactions that have come under my notice have been within its statutory powers.

Yours sincerely,

sgd J.J. Macdonell

Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1975

	<u>Assets</u>	
	<u>1975</u>	<u>1974</u>
Current assets:		
Cash	\$ 11,182	\$ 34,506
Accounts receivable	128,995	94,076
Interest accrued on investments	<u>6,944</u>	<u>11,569</u>
Total current assets	147,121	140,151
Investments in bonds of, or guaranteed by, Canada, at cost (Market value, 1975, \$477,937; 1974, \$607,575)	524,062	675,813
Prepaid promotion expense	-	72,500
Patent rights at nominal value (Note 2)	1	1
Experimental equipment on loan to licensees, under shared development program, at nominal value (Note 3)	<u>1</u>	<u>1</u>
	<u>\$ 671,185</u>	<u>\$ 888,466</u>

The accompanying notes are an integral part of the financial statements.

Approved by the Board:

sgd. W. G. Schneider
.....
Director

sgd. B.G. Barrow
.....
Director

Liabilities

	<u>1975</u>	<u>1974</u>
Current liabilities:		
Accounts payable	\$ 246,946	\$ 247,567
Royalties paid in advance	<u>500</u>	<u>-</u>
Total current liabilities	<u>247,446</u>	<u>247,567</u>

Shareholder's equity

Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:		
Balance at beginning of year	344,700	392,946
Deduct: Excess of expense over income for the year, per statement of income and expense	<u>217,160</u>	<u>48,246</u>
Balance at end of year	<u>127,540</u>	<u>344,700</u>
	<u>423,739</u>	<u>640,899</u>
	<u>\$ 671,185</u>	<u>\$ 888,466</u>

I have examined the above Balance Sheet and the related Statement of Income and Expense and have reported thereon under date of May 15, 1975, to the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

sgd. J. J. Macdonell

 Auditor General of Canada

Statement of Income and Expense for the year ended March 31, 1975

	<u>1975</u>	<u>1974</u>
Income:		
Royalties and licensing fees	\$ 677,629	\$ 656,596
Less: Awards to inventors	60,518	57,663
Payable to third parties		
in accordance with		
agreements	<u>179,506</u>	<u>165,500</u>
	<u>240,024</u>	<u>223,163</u>
	437,605	433,433
Interest earned	46,792	54,975
Service charges under agency agreements	40,673	28,189
Development assistance recovered	<u>29,896</u>	<u>51,912</u>
	554,966	568,509
Expense:		
Salaries	379,589	363,414
Patent agents fees and other patenting		
costs (net)	126,016	93,981
Amortization of promotion expense (Note 7)	72,500	10,000
Accommodation, equipment and other rentals	56,384	54,253
Development assistance	30,896	30,682
Drug screening	28,409	-
Professional and special services	22,057	13,980
Office supplies, printing, equipment		
and furnishings	20,346	19,555
Travel	12,533	11,882
Services provided by National Research		
Council of Canada	11,534	10,025
Communications	10,590	7,220
Miscellaneous	<u>1,272</u>	<u>1,763</u>
	<u>772,126</u>	<u>616,755</u>
Excess of expense over income	<u>\$ 217,160</u>	<u>\$ 48,246</u>

The accompanying notes are an integral part of the financial statements.

Notes to the financial statements for the year ended March 31, 1975

1. Accounting policies

Industrial and intellectual property rights

Expenditures relating to the acquisition, protection, licensing and maintenance of industrial and intellectual property rights are charged to expense as incurred and income, if any, derived from these patent rights is recorded when reported by the licensee.

Development expenditures

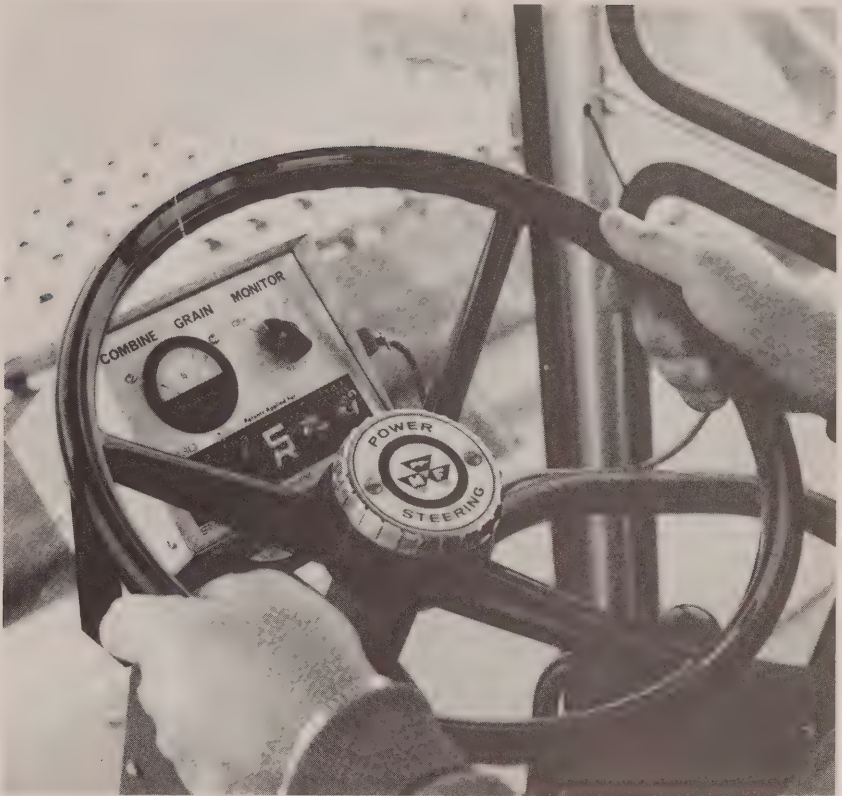
Expenditures for development assistance and equipment under development contracts are charged to expense as incurred and any recoveries are recorded as income in the year received.

Furniture, equipment and depreciation

Expenditures for furniture and equipment are charged to expense; accordingly, no depreciation charge is recorded.

2. To date, from 1948, the Corporation has expended approximately \$1,220,900 on unexpired patent rights for inventions.
3. The cost value of equipment purchased under active development contracts amounts to \$148,500; \$25,000 of which was expended under a contract in 1974-75 to be recovered in 1975-76.
4. Salaries for 1974-75 include remuneration of directors as directors \$2,250 (1973-74 \$4,000) and remuneration of officers as officers, \$69,250 (1973-74 \$50,700.) The Corporation has twelve directors and five officers. Two officers are also directors.
5. Not reflected in the financial statements are royalties due over a period of years under an agreement with a foreign licensee and in dispute because of differences between that licensee and a third party government and others using the inventions. A settlement is being negotiated whereby the licensee has agreed to pay the Corporation a total of \$166,150 by instalments with the total amount fully paid by March 31, 1978.

6. A contingent liability of approximately \$36,000 exists with respect to taxes not deducted at the source from royalties remitted by a foreign licensee.
7. During the year the unamortized balance of prepaid promotion expense was written off although royalty payments are expected to continue for the remaining life of the main patent. To date royalty income exceeds the total promotion expense originally incurred.
8. On April 15, 1975, a foreign government approved a royalty agreement which resulted in a royalty collection of \$190,000, 50% of which is to be paid to the former patent owner.



Installation of the Smith-Roles Grain-Loss Monitor control unit in a self-powered combine. Many of these units have been sold worldwide during the seven years of CPDL's license agreement with Smith-Roles, Limited, Saskatoon. This is but one of the many useful devices to have come from the University of Saskatchewan's Department of Agricultural Engineering.

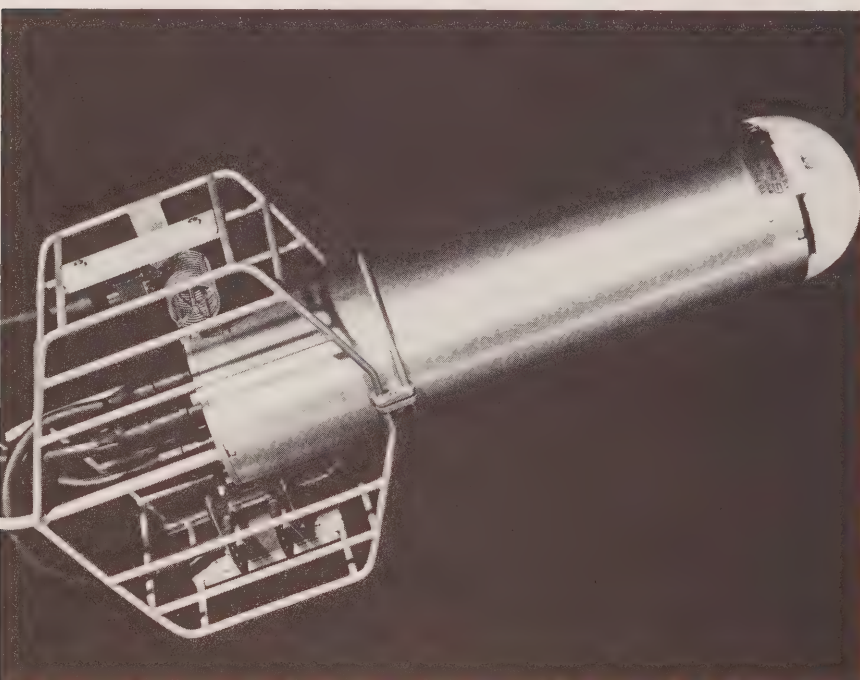
Indicateur Smith-Roles de perte des grains dans une moissonneuse-batteuse à moteur. Plusieurs de ces indicateurs ont été vendus dans le monde entier pendant les sept années qui liaient Smith-Roles, Limited, de Saskatoon, à la S.C.B.E. Ce système est l'un des plus utiles que nous ait fourni la faculté de de Saskatchewan.



A new type of oil burner for domestic furnaces, developed in the Canadian Combustion Research Laboratories of the Department of Energy, Mines and Resources, has now been transferred to Canadian Patents and Development Limited. As can be seen from the photographs, the new burner (left) produces a clean, soot-free flame, compared with the conventional one (right). Additionally, the new burner provides a 10-20% improvement in efficiency.



Un nouveau type de brûleur à mazout, pour les calorifères des maisons d'habitation, mis au point par les laboratoires de recherche sur la combustion du Ministère canadien de l'énergie, des mines et des ressources, a été maintenant transféré à la Société canadienne des brevets et d'exploitation limitée. Comme on peut le constater grâce à ces photographies, le nouveau brûleur (à gauche) donne une flamme propre et sans fumée, ce qui n'est pas le cas de la flamme du brûleur traditionnel (à droite). En outre, ce nouveau brûleur a un rendement de 10 à 20% supérieur à l'autre.



La sonde mise au point par Guildline Instruments Limited de Smiths Falls et brevetée par la SCBE, qui est employée au CNRC pour mesurer la conductivité salinité, la température et la profondeur est une des 23 inventions de la Guildline brevetées par la SCBE. La Société Guildline qui a débuté dans le domaine des appareils électriques de précision, construit aussi maintenant des appareils de ce genre destinés à l'océanographie en plus de fabriquer des instruments de service.

The NRC Conductivity Salinity, Temperature and Depth measuring probe built by Guildline Instruments Limited of Smiths Falls under license from CPDL. This is one of the 23 CPDL inventions licensed to Guildline who began with precision electrical instruments, are now also building oceanography instruments of this type, and are moving into the utilities instrumentation field as well.

6. Il existe un passif éventuel d'environ \$36,000 provenant d'impôts qui n'ont pas été déduits à la source sur les redevances versées par un concessionnaire étranger.
7. Le montant non amorti des frais de promotion payés d'avance a été radié des livres au cours de l'année bien qu'on s'attende que les versements de redevances continuent jusqu'à la date d'expiration du brevet. Jusqu'à date, le revenu provenant des redevances excède le chiffre des dépenses totales de promotion engagées initialement.
8. Le 15 avril 1975, un gouvernement étranger a approuvé un accord de redevances qui a rapporté la somme de \$190,000, dont la moitié sera versée à l'ancien titulaire du brevet.

Notes aux états financiers pour l'année terminée le 31 mars 1975

1. Conventions comptables

Droits de propriété industrielle et intellectuelle

Les dépenses relatives à l'acquisition, à la protection, et au maintien des droits de propriété industrielle et intellectuelle ainsi qu'à l'octroi des licences sont portées aux dépenses au fur et à mesure qu'elles sont engagées, et le revenu, s'il y a lieu, réalisé grâce à ces droits de brevets est inscrit lorsqu'il est déclaré par le concessionnaire.

Aide au développement

Les dépenses relatives à l'équipement et l'aide au développement dans les contrats de développement sont portées aux dépenses au fur et à mesure qu'elles sont engagées, et tout produit de la vente de ce matériel est porté au revenu de l'année.

Mobilier, équipement et amortissement

Les dépenses en mobilier et en équipement sont portées aux dépenses et par conséquent, aucun frais d'amortissement n'est imputé.

2. Depuis 1948 jusqu'au 31 mars 1975, la Société a dépensé environ \$1,220,900 en droits de brevets non expirés.

3. La valeur de l'équipement acheté en vertu de contrats de développement s'élève à \$148,500 dont \$25,000 ont été imputés à un contrat exécuté au cours de l'année 1974-75, lesquels sont recouvrables au cours de l'année 1975-76.

4. Les traitements de l'année 1974-75 comprennent la rémunération des administrateurs au montant de \$2,250 (1973-74 - \$4000) et la rémunération des fonctionnaires qui s'est chiffrée à \$69,250 (1973 - 74 - \$50,700). La Société compte douze administrateurs et cinq fonctionnaires. Deux fonctionnaires sont également administrateurs.

5. Les états financiers ne font pas état de redevances qui s'échelonnent sur un certain nombre d'années et qui sont dues en vertu d'une convention avec un concessionnaire étranger. Ces redevances sont comptées à cause de certains différends qui existent entre le concessionnaire, un tiers gouvernement et d'autres personnes qui utilisent l'invention. On négocie présentement un accord en vertu duquel le concessionnaire s'engage à payer à la Société un total de \$166,150, payable par versements et totalement remboursable d'ici la fin de mars 1978.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITEE

Etat des revenus et dépenses pour l'année terminée le 31 mars 1975

Revenus:	1975	1974
Redevances et droits de concession		
de brevets	\$ 677,629	\$ 656,596
Moins: Primes versées aux inventeurs	60,518	57,663
Sommes à payer à des tiers conformément aux accords	179,506	165,500
	<u>240,024</u>	<u>223,163</u>
Intérêt gagné	46,792	54,975
Remboursements et commissions selon des conventions de mandataire	40,673	28,189
Recouvrement de frais d'aide au développement	<u>29,896</u>	<u>51,912</u>
Dépenses:	554,966	568,509
Traitements	379,589	363,414
Honoraires des agents de brevets et autres frais de brevets (nets)	126,016	93,981
Amortissement des frais de lancement (Note 7)	72,500	10,000
Installations, équipement et autres	56,384	54,253
Frais de location	30,896	30,682
Frais d'aide au développement	28,409	-
Examen des substances nouvelles pour déterminer leur activité physiologique	22,057	13,980
Papeterie, fournitures, impression, équipement et mobilier de bureau	20,346	19,555
Frais de voyage	12,533	11,882
Services fournis par le Conseil national de recherches	11,534	10,025
Communications	10,590	7,220
Divers	<u>1,272</u>	<u>1,763</u>
Excédent des dépenses sur les revenus	<u>217,160</u>	<u>48,246</u>

Les notes ci-jointes font partie intégrante des états financiers.

Passif

Passif à court terme		
Comptes à payer	\$ 246,946	\$ 247,567
Redevances payées d'avance	500	-
Total du passif à court terme	247,446	247,567
Avoir des actionnaires		
Capital-actions:		
Autorisé - 10,000 actions sans		
valeur nominale		
Emis - 5,000 actions,		
entièrement payées	296,199	296,199
Excédent:		
Solde au début de l'année	344,700	
A déduire: Excédent des		
dépenses sur les revenus		
pour l'année d'après l'état		
des revenus et dépenses	217,160	48,246
Solde à la fin de l'année	127,540	344,700
	423,739	640,899
	\$ 671,185	\$ 888,466

J'ai examiné le bilan ci-dessus et l'état des revenus et dépenses s'y rapportant et j'en ai fait rapport le 15 mai 1975 au Président du Comité de la recherche scientifique et industrielle du Conseil privé.

L'Auditeur général du Canada
signé J. J. Macdonell

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE
(Constituée en vertu de la Loi sur les Corporations canadiennes)

Bilan au 31 mars 1975

Actif

	1975	1974
Actif à court terme		
Encaisse	\$ 11,182	\$ 34,506
Comptes à recevoir	128,995	94,076
Intérêt couru sur placements	6,944	11,569
Total de l'actif à court terme	147,121	140,151
Placements sur obligations émises ou garanties par le Canada, au prix coûtant, (valeur boursière, 1975, \$477,937; 1974, \$607,575)	524,062	675,813
Frais de lancement payés d'avance	-	72,500
Droits de brevets, valeur nominale (Note 2)	1	1
Équipement expérimental prêté à des concessionnaires, en vertu du programme de développement à frais partagés, valeur nominale (Note 3)	1	1
	\$ 671,185	\$ 888,466

Les notes ci-jointes font partie intégrante des états financiers.

Approuvé par le Conseil d'administration:

Administrateur
signé W. G. Schneider
Administrateur
signé B. G. Barrow



Ottawa, le 15 mai 1975

L'honorable Charles M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Ontario.
Monsieur le Ministre,

J'ai examiné le bilan de la Société canadienne des brevets et d'exploitation limitée au 31 mars 1975, ainsi que l'état des revenus et dépenses, pour l'année terminée à cette date. Mon examen a comporté une revue générale des méthodes de comptabilité et les sondages de registres comptables et de pièces justificatives que j'ai jugés nécessaires dans les circonstances.

A mon avis, ces états financiers présentent un aperçu juste et fidèle de la situation financière de la Société au 31 mars 1975, ainsi que les résultats de son exploitation pour l'année terminée à cette date, conformément aux principes comptables généralement reconnus, et appliqués de la même manière qu'au cours de l'année précédente.

De plus, je déclare que la Société, à mon avis, a tenu des livres de comptabilité appropriés, que les états financiers sont conformes à ces derniers et que les opérations dont j'ai eu connaissance ont été effectuées dans le cadre de ses pouvoirs statutaires.

Je vous prie d'agréer, Monsieur le Ministre, l'assurance de ma très haute considération.

L'Auditeur général du Canada
signé J.J. Macdonell

RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

Aspects financiers

Les états financiers de la Société et le rapport de l'Auditeur général pour l'année financière 1974-75 montrent que les dépenses dépassaient les recettes de \$218,000. Les dépenses de promotion payés à l'avance qui n'ont pas été dépensés au cours de l'exercice précédent et dont la dépense a été autorisée par les directeurs à leur réunion annuelle de 1974.

Un contrat d'aide au développement, s'élevant à \$25,000, a été signé; selon les clauses du contrat, la somme totale sera remboursée au cours de l'année 1975.

Les investissements de la SCBE, qui se chiffrent maintenant par \$524,062, ont subi une diminution à cause des dépenses qui excèdent les recettes des dernières années.

La SCBE continue d'influer grandement sur le transfert de la technologie des laboratoires du gouvernement et des universités à l'industrie. Cependant, l'augmentation des redevances n'a pas su égaler celle des frais d'exploitation et au cours des prochaines années, on fera l'impossible pour tenter d'influencer l'économie et d'accroître le revenu en redevances.

Le personnel

Le personnel de la SCBE se compose de 26 personnes dont les qualités conviennent spécialement à ce champ d'action qui touche aux inventions, aux inventeurs, aux brevets et à l'industrie. En procurant un service spécialisé, le personnel de la SCBE demeure unique au sein du gouvernement fédéral et sans l'entière collaboration de tous et chacun, la SCBE n'aurait pu progresser si rapidement.

En décembre 1974, le maréchal de l'Air C. L. Annis a résigné ses fonctions de gestionnaire général qu'il occupait depuis 1966. Sa compétence et son jugement ont su triompher des années où l'on a observé un déclin général des conditions économiques. Tous, nous lui souhaitons la plus belle des retraites.

mettre au point une technique à grande échelle dont l'objectif serait de sous-autoriser le procédé et de fournir l'équipement et l'expertise nécessaires aux sociétés d'extraction.

La SCBE a l'intention d'intensifier ses recherches dans le domaine de la commercialisation et de promouvoir l'intérêt du monde entier envers les inventions canadiennes. A cette fin, une étude du marché européen sera effectuée au cours des mois de juillet et août 1975, en présentant aux industries de l'Allemagne de l'Ouest, de la Suisse et de la France un groupe choisi de produits d'invention et faisant l'objet d'un brevet.

En outre, les preneurs éventuels de licence, recevront de la SCBE plusieurs bulletins de nouvelles décrivant les inventions les plus intéressantes, les marchés et les demandes que la Société s'attend de recevoir.

En février 1976, la SCBE aura un kiosque à l'exposition universelle de technologie qui se tiendra à Chicago; elle y enverra des membres de son personnel. Il s'agira de la plus grande exposition internationale de technologie jamais présentée. On pourra s'entretenir devant les inventions faites par la France, la Hongrie, la Roumanie, le Royaume-Uni, le Japon, l'U.R.S.S. et les Etats-Unis.

Examen des produits pharmaceutiques

En 1974, un nouveau projet encourageant les universités canadiennes à envoyer les produits mis au point dans leurs laboratoires à la SCBE aux fins d'évaluation a été lancé. Si, après analyse, les produits présentent une activité pharmaceutique, la SCBE étudie alors la possibilité d'obtention d'un brevet et l'importance de la découverte qui permettent d'accorder une licence à l'industrie pharmaceutique qui exploitera le produit. On prévoit qu'une partie des redevances perçues sera utilisée pour exécuter d'autres travaux de recherche et de développement. On espère ainsi promouvoir l'industrie pharmaceutique canadienne.

provenant d'un plus grand nombre de licences accordées ces dernières années, particulièrement en ce qui concerne certaines nouvelles inventions dont les perspectives s'annoncent intéressantes.

Voici quelques unes de ces inventions. Davantage de réservoirs pétroliers sous-marins du modèle Ekofisk qui font usage de l'invention du brise-lames perforé du CNRC seront construits en Europe. Un de ces réservoirs est en voie de construction et un autre est prévu.

Un détenteur de licence se prépare à lancer un nouveau produit mis au point par le ministère de l'Agriculture offrant de nombreux avantages à l'usager industriel et ayant un grand potentiel. Il s'agit d'œufs congelés dont l'aspect ressemble à celui du "pop-corn" et présente sous forme de petites boules non adhérentes.

On s'attend à ce que l'invention très prometteuse des composites renforcées de mica faite à l'Université de Toronto soit mise au point afin de profiter du grand potentiel de commercialisation de ce produit.

La SCBE a récemment accordé une licence pour une méthode d'extraction du cobalt et du nickel, mise au point par Eldorado Nuclear Ltd., à une société japonaise entrain d'aménager une nouvelle fonderie dans le but d'utiliser cette technique.

La SCBE a octroyé une licence à une nouvelle firme de Vancouver en vue de mettre au point et de commercialiser le nouveau projet intéressant d'un arc voltaïque ultralumineux conçu par le département de physique de l'Université de Colombie-Britannique. Des petites lampes du même type ont fonctionné à plus de 200 kilowatts; il se pourrait qu'une fois mise au point, une seule de ces lampes parvienne à éclairer suffisamment un stade de football.

La SCBE a demandé qu'on brevète un procédé d'extraction de sable et d'argile utilisant la technique d'agglomération sphérique du CNRC, procédé qui pourrait servir dans les sables bitumineux de l'Alberta. La licence a été accordée à une société d'Alberta qui se propose d'établir une usine-pilote permettant de

Demandes d'évaluation de brevets d'invention

Nous avons reçu 279 nouvelles demandes provenant des diverses sources, soit 33 de moins que l'an dernier. Les fonctionnaires sont à l'origine de 192 demandes, 85 provenaient des universités, 2 d'organismes provinciaux de recherche et le dernier d'un institut.

Prises de brevets

L'année dernière, la S.C.B.E. a déposé des demandes de brevets pour 61 inventions et 151 demandes conventionnelles. Sur le nombre de demandes faites, respectivement 80% et 88% des demandes ont été présentées par les agents de brevets de la S.C.B.E.

Les inventeurs

La S.C.B.E. a continué sa politique reconnaissant le mérite des inventeurs en décernant à chacun l'insigne enregistré de "l'inventeur". Actuellement, le total d'inventeurs ainsi honorés s'élève à 705 dont 41 l'ont été l'année dernière.

Promotion des inventions

Au cours de l'année dernière, le personnel du service de promotion de la S.C.B.E. a accepté 55 nouvelles inventions aux fins d'exploitation, parmi lesquelles 20 consistaient en inventions fondées sur la conception et l'ingéniosité et non protégées par des brevets d'invention. Cette année, 32 licences ont été accordées dont 28 représentaient 51 inventions pour lesquelles des brevets avaient été délivrés ou des demandes de brevets déposées pendant l'année ou au cours des années antérieures. Le reste des inventions comprenait un programme d'ordinateur et les modèles de trois instruments fondés sur l'ingéniosité. On a refusé 34 inventions dont les idées étaient démodées ou les brevets avaient expiré.

Les brevets de plusieurs des inventions les plus avancées figurant au répertoire de la S.C.B.E. ont expiré en 1974. Toutefois, la perte résultant de l'expiration de ces brevets devrait être compensée par l'augmentation prévue des revenus

La Société canadienne des brevets et d'exploitation limitée (S C B E) a été fondée dans le but de rendre accessible au public, grâce à des licences octroyées à l'industrie, les produits de la propriété industrielle et intellectuelle résultant de la recherche et du développement financés par l'Etat.

Champ d'action

Les idées et les inventions soumises à la S C B E proviennent des fonctionnaires de tous les ministères fédéraux, ainsi que du personnel professionnel et de soutien des universités, des sociétés de la Couronne et des établissements provinciaux de recherche. La Société les étudie d'abord en vue de déterminer s'il y a matière à brevet et quels en sont les avantages commerciaux. Quant aux inventions jugées non brevetables, on peut accorder une licence indépendante à titre de technique très ingénieuse, ou avec d'autres brevets. Les frais et les redevances payés en vertu d'une licence servent à défrayer la S C B E de ses frais d'exploitation.

Origine des inventions

La S C B E a été créée en 1947 afin de s'occuper des inventions brevetables provenant du Conseil national de recherches du Canada (CNR) et d'autres centres de recherche financés par le gouvernement. La promulgation, en 1954, de la Loi sur les inventions des fonctionnaires publiés a eu pour effet de faire de la S C B E le principal organisme chargé de prendre des brevets et d'accorder des licences pour des inventions appartenant au gouvernement canadien.

De plus, la S C B E s'est vu accorder le pouvoir, dans le cadre de la Loi sur les corporations canadiennes, de conclure des accords avec les universités, les organismes provinciaux de recherche et d'autres organismes financés par le public, en ce qui concerne leurs inventions.

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Auditeur général du Canada

Banque Canadienne Impériale

de Commerce

275, rue Slater

Ottawa, Ontario, K1A 0R3

¹Retraité 30 déc. 74

²Nommé 1 jan. 75

SIEGE SOCIAL

BANQUE

VERIFICATEUR

CONSEILLER JURIDIQUE

Comptabilité

Administration

Contrats et licences

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¹ Décédé 28 août 74



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 3 juillet 1975

L'honorable C. M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

Monsieur le Ministre,

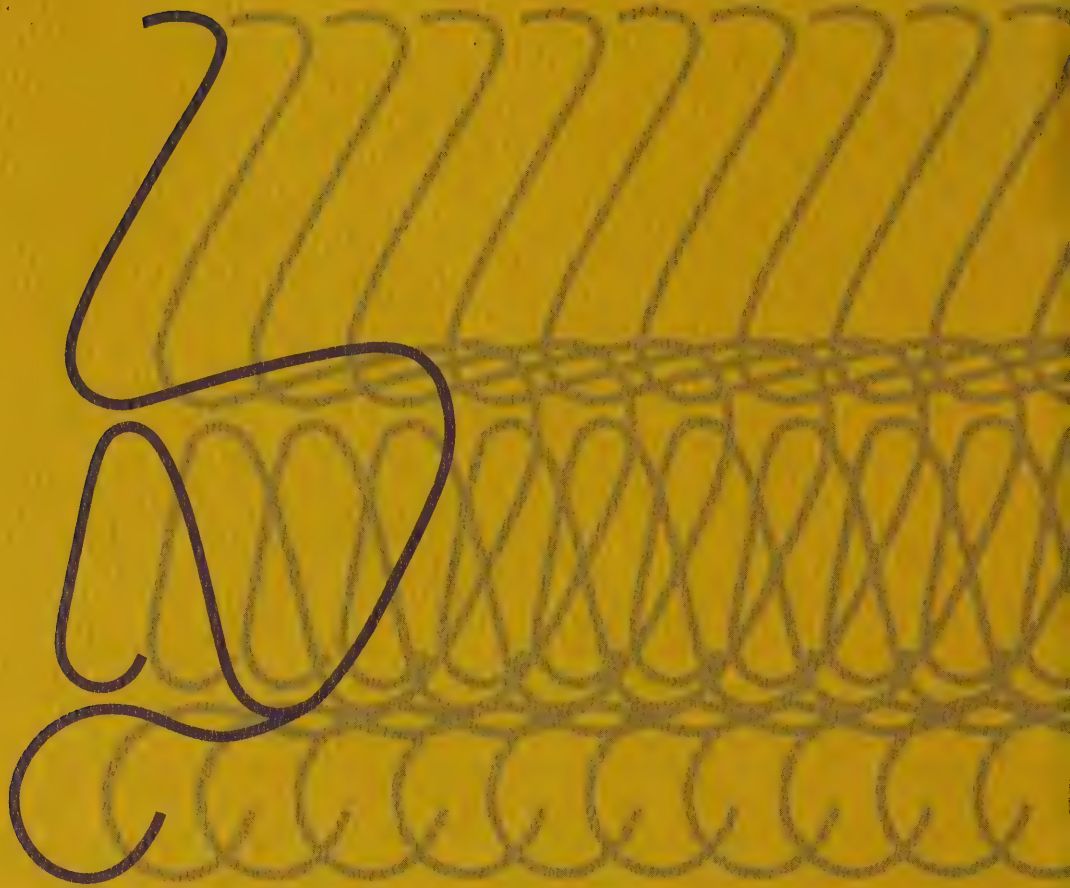
Conformément à l'article 75 (3) de la Loi sur
l'administration financière, j'ai l'honneur de vous présenter,
au nom du Conseil d'administration, le Rapport annuel de la
Société canadienne des brevets et d'exploitation, limitée, pour
l'exercice qui s'est terminé le 31 mars 1975, de même que l'état
des finances et le rapport de l'Auditeur général du Canada.

Je vous prie, Monsieur, d'agréer mes sentiments les meilleurs.

R. D. Hiscocks,
Président.

SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE
(S C B E)

RAPPORT ANNUEL
1975



ANNUAL REPORT 1976

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ANNUAL REPORT
1976

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 11 June 1976

The Honourable C.M. Drury,
Chairman of the Committee of the Privy
Council on Scientific and Industrial
Research,
Ottawa, Canada.

Dear Mr. Drury,

In accordance with Section 75 (3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1975-76. The Company's Financial Statement and the Report of the Auditor General are included.

Yours sincerely,

R. D. Hiscocks,
President.

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275 Slater Street
Ottawa, Ontario. K1A 0R3

Canadian Patents and Development Limited (CPDL) was established to make available to the public, through licensing arrangements with industry, the industrial and intellectual property which results from publicly funded research and development.

Activities

CPDL may receive ideas and inventions from public servants in all departments of the federal government and from the professional staff and employees of universities. The ideas and inventions are first assessed for patentability and commercial use. Patent applications may then be filed in various countries in respect of those which are considered commercially exploitable and patentable. Some which are not patentable may be licensed as know-how independently, or together with patents. That portion of the license fees and royalties paid under license agreements and retained by CPDL is used to defray CPDL commercial operating expenses.

Sources of Invention

CPDL was originally established in 1947 to handle patentable material of the National Research Council of Canada (NRC) and other government-financed research. The passage of the Public Servants Inventions Act in 1954 made CPDL the prime patenting and licensing agency for public servant inventions which by that Act, belong to the Canadian Government.

CPDL has also entered into agreements with many universities, provincial research organizations, and other publicly financed institutions to assess, patent and license their industrial and intellectual property.

Disclosures

During the FY 1975-76, CPDL received 254 new disclosures from all its sources; this was 25 less than last year. Government departments and agencies provided 162 of the total disclosures, while of the remaining, 88 were received from universities, one from a provincial research organization, one from an institution, one from a licensee and one from a retired public servant inventor.

Patenting

Patent officers of CPDL continued to prepare and file a large percentage of the CPDL patent applications. Of the 66 initial applications which were filed last year, 90% were prepared by CPDL patent officers and they also prepared 77 % of the 208 convention applications filed.

Inventors

The CPDL presentation to qualifying inventors of the lapel pins bearing replicas of the CPDL registered symbol "The Inventor" continued to serve as a small but important acknowledgement of the role of the inventor in Canadian technological progress. There are now 748 inventors who have worn their pins with pride of achievement. 43 are new members of this small group, having been accredited during the past year.

Marketing and Licensing

The Marketing and Licensing staff of CPDL, during FY 1975-76, accepted 71 new developments for exploitation, of which 15 comprised know-how, unprotected by patent applications. Of the 31 license agreements which were completed during the year, 25 involved 32 inventions for which patent applications or patents existed and six agreements were for know-how only. 9 licenses were terminated.

The patent inventory was reduced by a major revision of the "Inventions Catalog". Besides 21 inventions on which patent protection had expired, 203 cases were eliminated from further exploitation because they were deemed no longer licensable.

CPDL participated in the first World Fair for Technology Exchange held in Chicago under the auspices of Dr. Dvorkovitz and Associates. This was the company's first exhibition outside Canada for several years and served both to renew contacts with American and other foreign companies and to create many new ones.

CPDL retired the brochure "Inventions for Industry" which had been used at exhibitions for several years and replaced it with a new general purpose leaflet entitled "Think of Us", which

described the company in terms of some of its past successes.

The improved Aircraft Artificial Horizon invention received during the year from the Department of National Defence undoubtedly has promise. It presents data to pilots by way of a unique illuminated cockpit display which has won the praise of aircrew who have tested it. Several companies have been asked to prepare for CPDL consideration, commercial development and exploitation proposals regarding this invention.

The Ekofisk Oil Storage Tank in the North Sea, installed in August 1973, commenced operation in 1974. The structure cost \$13 million to build and because it could also be used as a platform for a gas processing plant, a purpose for which it was not originally intended, the Company recovered the whole cost of the structure in the first 20 days of operation. A larger structure of a similar type was installed in August 1975 and others under construction will be installed in August 1976, August 1977, and August 1978, and perhaps August 1979.

CPDL has also filed patent applications on a perforated breakwater storage tank of slip formed concrete design which, when completed, will be towed horizontally into position in the ocean where it will be rotated 90° and sunk to stand vertically on the ocean floor in more than 900 feet of water.

One of our TEA laser licensees has begun to promote a new system that permits marking of batch and date information on objects by evaporation of surface finishes. Very fine resolution is possible, even when marking objects moving at high speed. The system should be useful in marking such things as soft drink bottle caps, food packages, and electronic components. The system could prove to be a volume application of lasers which may eventually surpass in sales lasers used for research purposes.

Service Function

During the FY 1975-76 CPDL also continued its service role, acting in an advisory capacity to organizations and individuals, including government departments and agencies, on patent and other matters dealing with industrial and intellectual property. Over two officer man years were spent on this activity, a prime example of which is the monthly meeting on CPDL

and the Department of National Defence officers. These meetings, which were started in 1975 to increase co-operative effort, have resulted in DND-CPDL jointly sponsoring two industry seminars on specific inventions.

Drug Screening

The drug screening programs, which was started on an experimental basis in 1974, was continued in FY 1975-76. A total of 112 compounds have been submitted for screening since the commencement of the program. Three of that number appear to have commercial potential and a patent application has been filed in respect of one, while patent applications for the other two are being prepared. The disbursement cost of the program for the year has been approximately \$101,000.

Financial Highlights

For the first time in several years the CPDL financial statements, as audited by the Auditor General, for the FY 1975-76 revealed that income exceeded expenses to the extent that \$36,011 was transferred to surplus.

Also this year, for the first time, CPDL received compensation for services which in the past had been rendered without charge to certain government departments and agencies. This made it possible to continue to provide those services without incurring a loss, even though operating costs have risen considerably.

The CPDL investment portfolio remained unchanged during FY 1975-76 and was valued at \$524,062.

Staff

The CPDL staff of 26 provides services which are unique in government operations. The efforts of these individuals are directed towards assessing, protecting where possible by patents or other means, and licensing, industrial and intellectual property. The success of CPDL is due in a large part to their diligence and dedication.

In July 1975, Mr. F.R. Charles retired from CPDL after 27 years with the Company, during which time he served, first, as Chief Patent Officer, and later, in the appointments

of General Secretary and Secretary-Treasurer. For the past five years he was Secretary and senior advisor to the President. His counsel over the years was of much value to all officers of the Company. Everyone tendered their best wishes to him on his retirement.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS



AUDITOR GENERAL OF CANADA

AUDITEUR GÉNÉRAL DU CANADA

Ottawa, May 19, 1976

The Honourable Charles M. Drury, P.C., C.B.E.,
D.S.O., Q.C., M.P.,
Chairman of the Committee of the Privy Council
on Scientific and Industrial Research,
Ottawa.

Dear Mr. Drury,

I have examined the balance sheet of Canadian Patents and Development Limited as at March 31, 1976 and the statement of income and expense for the year then ended. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In my opinion these financial statements give a true and fair view of the financial position of the Corporation as at March 31, 1976 and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

I further report that, in my opinion, proper books of account have been kept by the Corporation, the financial statements are in agreement therewith and the transactions that have come under my notice have been within its statutory powers.

Yours sincerely,

sgd J.J. Macdonell

Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporation Act)

Balance Sheet as at March 31, 1976

Assets

	<u>1976</u>	<u>1975</u>
Current assets:		
Cash	\$ 83,469	\$ 11,182
Accounts receivable less allowance for doubtful accounts (1976, \$26,794; 1975, nil)	127,854	128,995
Interest accrued on investments	<u>6,944</u>	<u>6,944</u>
Total current assets	218,267	147,121
Investments in bonds of, or guaranteed by, Canada, at cost (market value, 1976, \$453,887; 1975, \$477,937)	524,062	524,062
Patent rights at nominal value (Note 2)	1	1
Experimental equipment on loan to licensees, under shared development program, at nominal value (Note 3)	<u>1</u>	<u>1</u>
	\$ <u>742,331</u>	\$ <u>671,185</u>

The accompanying notes are an integral part of the financial statements.

Approved by the Board:

sgd. D. Hiscocks
.....
Director

sgd. W.G. Schneider
.....
Director

Liabilities

	<u>1976</u>	<u>1975</u>
Current liabilities:		
Accounts payable	\$ 277,281	\$ 246,946
Royalties paid in advance	<u>5,300</u>	<u>500</u>
Total current liabilities	<u>282,581</u>	<u>247,446</u>

Shareholders' Equity

Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	<u>296,199</u>	<u>296,199</u>
Surplus:		
Balance at beginning of year	127,540	344,700
Add: Amount transferred for the year, per statement of income and expense	<u>36,011</u>	<u>(217,160)</u>
Balance at end of year	<u>163,551</u>	<u>127,540</u>
	<u>459,750</u>	<u>423,739</u>
	<u>\$ 742,331</u>	<u>\$ 671,185</u>

Statement of Income and Expense for the year ended March 31, 1976

	<u>1976</u>	<u>1975</u>
Income:		
Royalties and licensing fees	\$ <u>1,007,022</u>	\$ <u>677,629</u>
Less: Awards to inventors	81,372	60,518
Payable to third parties in accordance with agreements	<u>279,431</u>	<u>179,506</u>
	<u>360,803</u>	<u>240,024</u>
	646,219	437,605
Service charges under agency agreements	55,693	40,673
Development assistance recovered	44,277	29,896
Interest earned	<u>43,899</u>	<u>46,792</u>
	790,088	554,966
Expense:		
Salaries	417,123	379,589
Patent agents' fees and other patenting costs (net)	178,656	126,016
Drug screening	100,440	28,409
Amortization of promotion expense	-	72,500
Accommodation, equipment and other rentals	61,817	56,384
Professional and special services	34,206	22,057
Development assistance	-	30,896
Provision for bad debts	29,152	-
Travel and removal	28,979	12,533
Office supplies, printing, equipment and furnishings	23,460	20,346
Communications	15,231	10,590
Services provided by National Research Council of Canada	13,709	11,534
Miscellaneous	<u>1,304</u>	<u>1,272</u>
	<u>904,077</u>	<u>772,126</u>
Excess of expense over income	113,989	217,160
Less: Funds provided by Parliamentary Appropriation:		
Science and Technology Vote 20	<u>150,000</u>	<u>-</u>
Amount transferred to surplus	\$ <u>36,011</u>	\$ <u>(217,160)</u>

The accompanying notes are an integral part of the financial statements.

Notes to the financial statements for the year ended March 31, 1976

1. Accounting policies

Industrial and intellectual property rights

Expenditures relating to the acquisition, protection, licensing and maintenance of industrial and intellectual property rights are charged to expense as incurred and income, if any, derived from these rights is recorded when reported by the licensee.

Development expenditures

Expenditures for development assistance and equipment under development contracts are charged to expense as incurred and any recoveries are recorded as income in the year received.

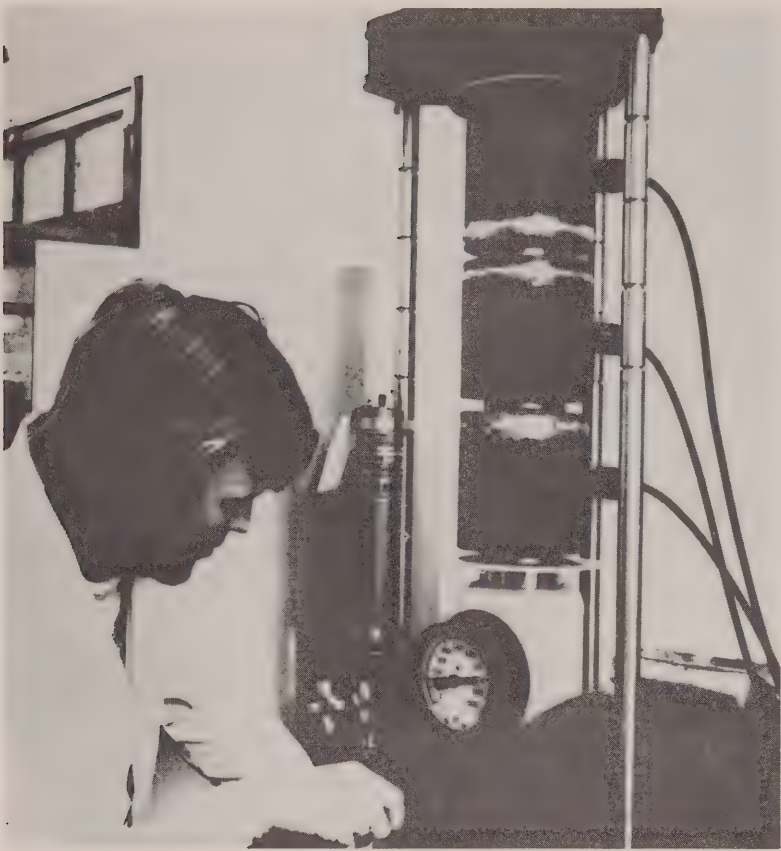
Furniture, equipment and depreciation

Expenditures for furniture and equipment are charged to expense as incurred; accordingly, no depreciation charge is recorded.

2. To date, from 1948, approximately \$1,385,000 has been expended on unexpired patent rights for inventions.
3. The cost value of equipment purchased under active development contracts and held by a licensee amounts to \$123,500.
4. Salaries for 1975-76 include remuneration of directors as directors, \$1,500 (1974-75 - \$2,250), and remuneration of officers as officers \$70,467 (1974-75 - \$69,250). The Corporation has twelve directors and five officers. Two officers are also directors.
5. Not reflected in the financial statements are royalties of \$166,150 in respect of prior years which were due under an agreement with a foreign licensee and had been in dispute

because of differences between that licensee and a third party government and others using the invention. During the year the Corporation concluded an agreement whereby a new licensee undertook to pay these royalties on the basis of future sales with any remaining balance due on March 31, 1978.

6. A contingent liability of approximately \$36,000 exists with respect to taxes not deducted at the source from royalties remitted in prior years by a foreign licensee.



This compact apparatus shortens to 5 hours the time required to obtain data to predict accurately the 28-day strength of concrete pre-mix. It is licensed to Smith-Roles Ltd., Saskatoon.

Cet appareil compact réduit à 5 heures le temps nécessaire pour obtenir des données permettant de prévoir avec exactitude la résistance de 28 jours du béton prémélangé. La licence a été accordée à Smith Roles Ltd. de Saskatoon.



A gas processing platform of the Perforated Breakwater design in its construction phase in Norway. It was built under a license to Portoceen Ltd. and installed in the Frigg gas field in the North Sea in 1975. The ocean is 100 meters deep at the Frigg site and the platform is 120 meters high and 62 meters in diameter.

Plate-forme pour une usine de traitement des gas, munie d'un brise-lames perforé, pendant sa construction en Norvège. La licence a été accordée à Portoceen Ltd. et la plate-forme a été installé en 1975 sur le gisement gazifère Frigg, dans la mer du Nord. A cet endroit, l'océan a 100 mètres de profondeur et la plate-forme a 120 mètres de hauteur et 62 mètres de diamètre.

The Lambert Twin Tower, manufactured under license by F. Fentiman and Sons Ltd., Ottawa, is used in surveying for precise angular and distance measurements from heights up to 60 feet. It is transportable dismantled or as a unit, by helicopter, and is used by the Geodetic Survey of Canada and private surveyors.

La Lambert Twin Tower, dont la licence est détenue par F. Fentiman and Sons Ltd. d'Ottawa, est utilisée pour mesurer avec précision des angles et des distances à des hauteurs pouvant aller jusqu'à 60 pieds. Pour la transporter, on peut soit la démonter, soit utiliser un hélicoptère. Elle sert au Service géodésique du Canada et à des arpenteurs privés.



5. Les états financiers ne tiennent pas compte de redevances totalisant \$166,150 à l'égard d'années antérieures. Ces redevances, dues aux termes d'une entente conclue avec un concessionnaire étranger, avaient été contestées par suite de certains différends entre le concessionnaire, un tiers gouvernement et d'autres personnes qui utilisaient l'invention. Pendant l'année, la Société a conclu un accord en vertu duquel un nouveau concessionnaire s'est engagé à payer ces redevances sur la base des ventes futures, le solde devant être versé le 31 mars 1978.
6. Il existe un passif éventuel d'environ \$36,000 à l'égard d'impôts qui n'ont pas été déduits à la source sur les redevances versées, au cours d'années antérieures par un concessionnaire étranger.

1. Conventions comptables

Droits de propriété industrielle et intellectuelle

Les dépenses pour l'acquisition, la protection, et le maintien des droits de propriété industrielle et intellectuelle, ainsi que pour l'octroi des licences sont portées aux comptes de dépenses au fur et à mesure qu'elles sont subies, et le revenu, s'il y a lieu, réalisé grâce à ces droits de brevets est inscrit lorsqu'il est déclaré par le concessionnaire.

Dépenses pour le développement

Les dépenses pour l'équipement et pour l'aide au développement en vertu des contrats de développement sont portées aux comptes de dépenses au fur et à mesure qu'elles sont subies, et les recouvrements, s'il y a lieu, sont comptabilisés comme revenus dans l'année du recouvrement.

Mobilier, équipement et amortissement

Les dépenses pour l'équipement et pour le mobilier sont portées aux comptes de dépenses au fur et à mesure qu'elles sont subies par conséquent, aucuns frais d'amortissement ne sont enregistrés.

2. Depuis 1948 jusqu'à ce jour, environ \$1,385,000 ont été dépensés en droits de brevets encore en vigueur pour des inventions.

3. La valeur de l'équipement acheté en vertu de contrats, actifs de développement, et détenu par le concessionnaire se chiffre à \$123,500.

4. Sont inclus dans les traitements de l'année 1975-76, la rémunération des administrateurs, en tant que tels, pour un montant de \$1,500 (1974-1975 - \$2,500) et la rémunération des cadres, en tant que tels, pour un montant de \$70,467 (1974-1975 - \$69,250). La Société compte douze administrateurs et cinq cadres, dont deux cadres sont également des administrateurs.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

État des revenus et dépenses pour l'année terminée le 31 mars 1976

1975	1976	
		Revenus:
		Redevances et droits de concession
		de brevets
\$ 677,629	\$ 1,007,022	Moins: Primes versées aux inventeurs
60,518	81,372	A payer à des tiers conformément
179,506	279,431	aux accords
240,024	360,803	
437,605	646,219	Frais de service selon des conventions
		de mandataire
40,673	55,693	Recouvrement de frais d'aide au
29,896	44,277	développement
46,792	43,899	Intérêt gagné
554,966	790,088	Dépenses:
		Traitements
379,589	417,123	Honoraires des agents de brevets
		et autres frais de brevets (nets)
126,016	178,656	Examen des substances nouvelles pour déterminer
		leur activité physiologique
28,409	100,440	Amortissement des frais de lancement
72,500	-	Location de locaux, équipement et autres
56,384	61,817	Services professionnels et spéciaux
22,057	34,206	Aide au développement
30,896	-	Mauvaises créances
-	29,152	Voyage et déménagement
12,533	28,979	Fournitures, impression, équipement et
20,346	23,460	mobiliier de bureau
10,590	15,231	Communications
		Services fournis par le Conseil national
		de recherches du Canada
11,534	13,709	Divers
1,272	1,304	
772,126	904,077	Excèdent des dépenses sur les revenus
217,160	113,989	Moins: Fonds provenant du crédit Parlementaire
		(crédit 20 - Sciences et technologie)
-	150,000	Montant porté au surplus
\$ (217,160)	\$ 36,011	

Les notes ci-jointes font partie intégrante des états financiers.

1. Conventions comptables

Droits de propriété industrielle et intellectuelle

Les dépenses pour l'acquisition, la protection, et le maintien des droits de propriété industrielle et intellectuelle, ainsi que pour l'octroi des licences sont portées aux comptes de dépenses au fur et à mesure qu'elles sont subies, et le revenu, s'il y a lieu, réalisé grâce à ces droits de brevets est inscrit lorsqu'il est déclaré par le concessionnaire.

Dépenses pour le développement

Les dépenses pour l'équipement et pour l'aide au développement en vertu des contrats de développement sont portées aux comptes de dépenses au fur et à mesure qu'elles sont subies, et les recouvrements, s'il y a lieu, sont comptabilisés comme revenus dans l'année du recouvrement.

Mobilier, équipement et amortissement

Les dépenses pour l'équipement et pour le mobilier sont portées aux comptes de dépenses au fur et à mesure qu'elles sont subies par conséquent, aucuns frais d'amortissement ne sont enregistrés.

2. Depuis 1948 jusqu'à ce jour, environ \$1,385,000 ont été dépensés en droits de brevets encore en vigueur pour des inventions.

3. La valeur de l'équipement acheté en vertu de contrats, actifs de développement, et détenu par le concessionnaire se chiffre à \$123,500.

4. Sont inclus dans les traitements de l'année 1975-76, la rémunération des administrateurs, en tant que tels, pour un montant de \$1,500 (1974-1975 - \$2,500) et la rémunération des cadres, en tant que tels, pour un montant de \$70,467 (1974-1975 - \$69,250). La Société compte douze administrateurs et cinq cadres, dont deux cadres sont également des administrateurs.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Etat des revenus et dépenses pour l'année terminée le 31 mars 1976

	1976	1975
Revenus:		
Redevances et droits de concession	\$ 1,007,022	\$ 677,629
de brevets		
Moins: Primes versées aux inventeurs	81,372	60,518
A payer à des tiers conformément		
aux accords	279,431	179,506
	<u>360,803</u>	<u>240,024</u>
Frais de service selon des conventions	646,219	437,605
de mandataire		
Recouvrement de frais d'aide au	55,693	40,673
développement	44,277	29,896
Intérêt gagné	<u>43,899</u>	<u>46,792</u>
Dépenses:	790,088	554,966
Traitements	417,123	379,589
Honoraires des agents de brevets		
et autres frais de brevets (nets)	178,656	126,016
Examen des substances nouvelles pour déterminer		
leur activité physiologique	100,440	28,409
Amortissement des frais de lancement	-	72,500
Location de locaux, équipement et autres	61,817	56,384
Services professionnels et spéciaux	34,206	22,057
Aide au développement	-	30,896
Mauvaises créances	29,152	-
Voyage et déménagement	28,979	12,533
Fournitures, impression, équipement et		
mobilier de bureau	23,460	20,346
Communications	15,231	10,590
Services fournis par le Conseil national		
de recherches du Canada	13,709	11,534
Divers	<u>1,304</u>	<u>1,272</u>
	904,077	772,126
Excédent des dépenses sur les revenus	113,989	217,160
Moins: Fonds provenant du crédit Parlementaire		
(crédit 20 - Sciences et technologie)	150,000	-
Montant porté au surplus	<u>\$ 36,011</u>	<u>\$ (217,160)</u>

Les notes ci-jointes font partie intégrante des états financiers.

Passif

1976	1975
\$ 277,281	\$ 246,946
5,300	500
282,581	247,446
<u>Avoir des actionnaires</u>	
Capital-actions	
Autorisé - 10,000 actions sans valeur	
au pair	
Emis - 5,000 actions, entièrement	
payées	
296,199	296,199
Surplus	
Solde au début de l'année	
A ajouter: Montant reporté pour l'année	
selon l'état des revenus et	
dépenses	
127,540	344,700
36,011	(217,160)
163,551	127,540
459,750	423,739
\$ 742,331	\$ 671,185

Solde à la fin de l'année

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE
(Constituées en vertu de la Loi sur les Corporations canadiennes)

Bilan au 31 mars 1976

Actif

	<u>1976</u>	<u>1975</u>
Actif à court terme		
Encaisse	\$ 83,469	\$ 11,182
Comptes à recevoir moins		
l'allocation pour créances	127,854	128,995
douteuses (1976-\$26,794 - 1975-néant)	<u>6,944</u>	<u>6,944</u>
Intérêt couru sur placements	218,267	147,121
Total de l'actif à court terme	218,267	147,121
Placements en obligations émises ou		
garanties par le Canada, au prix		
coûtant, (Valeur du marché: 1976 -		
\$453,887; 1975 - \$477,937)	524,062	524,062
Droits de brevets, valeur nominale	1	1
(Note 2)		
Equipement expérimental prêté à des		
concessionnaires, en vertu du		
programme de développement à frais		
partagés, valeur nominale	1	1
(Note 3)		
	<u>\$ 742,331</u>	<u>\$ 671,185</u>

Les notes ci-jointes font partie intégrante des états financiers.

Approuvé par le Conseil:

Administrateur

signé D. Hiscocks

Administrateur

signé W. G. Schneider



Ottawa, le 19 mai 1976

L'honorable C.M. Drury, C.P., C.B.E., D.S.O.,
C.R., député,

Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Ontario.

Monsieur le Ministre,

J'ai examiné le bilan de la Société canadienne des brevets et d'exploitation limité au 31 mars 1976, ainsi que l'état des revenus et dépenses, pour l'année terminée à cette date. Mon examen a comporté une revue générale des méthodes de comptabilité et les sondages de registres comptables et de pièces justificatives que j'ai jugés nécessaires dans les circonstances. A mon avis, ces états financiers présentent un aperçu juste et fidèle de la situation financière de la Société au 31 mars 1976, ainsi que les résultats de son exploitation pour l'année terminée à cette date, conformément aux principes comptables généralement reconnus, et appliqués de la même manière qu'au cours de l'année précédente.

De plus, je déclare que la Société, à mon avis, a tenu des livres de comptabilité appropriés, que les états financiers sont conformes à ces derniers et que les opérations dont j'ai eu connaissance ont été effectuées dans le cadre de ses pouvoirs statutaires.

Je vous prie d'agréer, Monsieur le Ministre, l'assurance de ma très haute considération.

L'Auditeur général du Canada
signé J.J. Macdonell

RAPPORT DE L'AUDITEUR GENERAL DU CANADA
ET
ETAT DES FINANCES

rapport de l'Auditeur général, ont fait apparaître des recettes supérieures aux dépenses et la somme de \$36,011 a été inscrite au poste des excédents.

Cette année, également pour la première fois, la S C B E a été rémunérée pour des services qu'elle offrait autrefois gratuitement à certains ministères et organismes gouvernementaux. Ainsi, la Société peut continuer de dispenser ces services sans subir de perte, même si ses frais d'exploitation se sont considérablement accrus.

Au cours de l'année financière 1975-1976, les investissements de la S C B E sont demeurés inchangés: ils sont évalués à \$524,062.

Le personnel

Le personnel de la S C B E se compose de 26 personnes qui assurent des services uniques au sein du gouvernement fédéral. Les efforts de ces personnes sont axés sur l'évaluation, la protection, grâce à un brevet ou par d'autres moyens, et l'octroi de licence touchant les produits de la propriété industrielle et intellectuelle. Le succès de la S C B E revient en grande partie à l'esprit d'initiative et au dévouement de son personnel.

En juillet 1975, M. F. R. Charles a pris sa retraite après avoir travaillé 27 ans au service de la Société. Monsieur Charles a d'abord été agent principal des brevets et par la suite, il a été nommé secrétaire général et secrétaire-trésorier. Depuis les cinq dernières années, il était secrétaire et conseiller principal du président. Ses conseils, au fil des ans, ont toujours été très appréciés par tous les agents de la Société. Chacun lui a souhaité la plus belle des retraites.

L'un de nos détenteurs de licence, l'inventeur d'un laser TEA, a commencé à faire connaître un nouveau système qui permet de marquer des numéros et des dates sur les objets, par évaporation des pellicules superficielles des fins. Il est possible d'obtenir une précision très grande, même dans le cas d'objets se déplaçant à haute vitesse. Le système devrait s'avérer utile dans le marquage des capsules des boissons gazeuses, des emballages d'aliments et des composantes électroniques. Le système pourrait également entraîner une multiplication des applications des lasers, qui pourrait finir par faire vendre plus de ces appareils que n'en utilise le secteur des recherches.

Rôle consultatif

Au cours de l'année financière 1975-1976, la S C B E a continué de dispenser des services en faisant fonction de conseiller, auprès des organismes et des personnes de même qu'auprès des ministères et organismes gouvernementaux, sur les questions de brevet et sur celles portant sur les produits de la propriété industrielle et intellectuelle. Cette activité, qui a nécessité plus de deux années-hommes, est bien illustrée par les rencontres mensuelles entre les agents de la Société et ceux du ministère de la Défense nationale. Ces réunions, instaurées en 1975 dans le but d'intensifier la collaboration, ont mené à l'organisation de deux colloques industriels entrepris conjointement par le MDN et la S C B E.

Examen des produits pharmaceutiques

Le programme d'examen des produits pharmaceutiques a été instauré, à titre expérimental, en 1974 et s'est poursuivi pendant l'exercice financier 1975-1976. Depuis le début de ce programme, un total de 112 produits ont été soumis à l'évaluation de la S C B E. De ce nombre, trois produits semblent avoir des applications intéressantes pour l'industrie pharmaceutique. On a déposé une demande de brevet en regard d'un de ces produits et des demandes de brevet en regard des deux autres devraient être bientôt prêtes. Les déboursés dans le cadre de ce programme s'élèveront approximativement à \$101,000 cette année.

Aspects financiers

Pour la première fois depuis de nombreuses années, les états financiers de 1975-1976 de la S C B E, tels qu'ils figurent au

La SCBE a tenu un kiosque à la première exposition universelle de la technologie qui s'est déroulée à Chicago, sous la direction de Dr. Dvorkovitz et associés. Il s'agissait de la première exposition de la Société, à l'extérieur du Canada, depuis plusieurs années et cette rencontre a permis de renouer des contacts avec les sociétés américaines ou autres et d'établir de nouveaux liens.

La SCBE a retiré de la circulation la brochure intitulée: Les inventions dans l'industrie, qui a servi pendant de nombreuses années lors des expositions, et l'a remplacée par une publication d'intérêt général intitulée: Songez à nous, qui relate les diverses réalisations de la Société au cours des dernières années.

Cette année l'une des inventions provenant du ministère de la Défense nationale et qui consiste en un horizon artificiel amélioré pour les avions, a, de toute évidence, un avenir prometteur. Le dispositif, qui transmet les données au moyen d'un voyant lumineux situé dans l'habitacle, a émerveillé tout le personnel navigant qui l'a expérimenté. On a demandé à plusieurs sociétés de travailler à l'élaboration de propositions visant son exploitation à des fins commerciales, puis de les soumettre à la SCBE.

L'exploitation du réservoir pétrolier, de type Ekotisk, installée en août 1973 dans la mer du Nord a commencé en 1974. Sa construction a coûté 13 millions de dollars et, étant donné qu'il pouvait également servir de plate-forme pour une usine de traitement des gaz, utilisation qui n'avait pas été prévue au départ, l'entreprise a recouvré, dans son entier, le coût de la construction dès les vingt premiers jours de l'exploitation. En août 1975, un réservoir de type semblable a été installé et d'autres qui sont en voie de construction, le seront en août 1976, en août 1977, en août 1978 et peut-être en août 1979.

La SCBE a également reçu une demande de brevet pour un réservoir de béton engobé, muni de brise-lames perforés et qui, une fois terminé, sera remorqué en position horizontale sur l'océan jusqu'à destination; alors on lui fera effectuer une rotation de 90° pour l'enfoncer dans la mer et le faire reposer verticalement sur les fonds marins à plus de 900 pieds de profondeur.

soit 25 de moins que l'an dernier. Les fonctionnaires sont à l'origine de 162 demandes, 88 provenaient des universités, une d'organisme provincial de recherches, une autre d'un établissement, une d'un détenteur de licence et une dernière d'un fonctionnaire inventeur à la retraite.

Prises de brevet

Les agents de brevets de la SCBE ont continué de présenter et de déposer un pourcentage élevé des demandes de brevet. Sur les 66 demandes initiales et les 208 demandes conventionnelles déposées l'an dernier, respectivement 90 p. 100 et 77 p. 100 ont été présentées par les agents de brevets de la SCBE.

Les inventeurs

La SCBE a continué à souligner de façon simple, mais qui a son importance, le rôle de l'inventeur dans le progrès technique au Canada, en décrétant aux inventeurs reconnus un bouton qui rappelle son symbole officiel: "l'inventeur". Le nombre total d'inventeurs à qui fut rendu cet honneur, s'élève maintenant à 748, en comptant les 43 nouveaux de l'année dernière.

Commercialisation et licences

Au cours de l'exercice financier 1975-1976, le personnel des services de commercialisation et des licences de la SCBE a accepté 71 nouvelles inventions aux fins d'exploitation, parmi lesquelles 15 consistaient en inventions de techniques ingénieuses non protégées par des brevets d'invention. Cette année, 31 licences ont été accordées, dont 25 représentaient 32 inventions pour lesquelles des brevets avaient été délivrés ou des demandes de brevets déposées; seulement 6 conventions en regard de la conception de techniques ingénieuses ont été acceptées. Cette année était la date d'expiration de 9 licences.

Le répertoire de la SCBE a été réduit lors d'une importante révision du Catalogue des inventions. Outre les 21 inventions dont les brevets ont expiré cette année, 203 autres inventions ont été refusées aux fins d'exploitation, parce que le renouvellement des licences correspondantes ne semblait plus justifié.

La Société canadienne des brevets et d'exploitation limitée (S C B E) a été fondée dans le but de rendre accessible au public, grâce à des licences octroyées à l'industrie, les produits de la propriété industrielle et intellectuelle résultant de la recherche et du développement financés par l'Etat.

Champ d'action

Les idées et les inventions soumises à la S C B E peuvent provenir des fonctionnaires de tous les ministères fédéraux, ainsi que du personnel professionnel et de soutien des universités, des sociétés de la Couronne et des établissements provinciaux de recherches. La Société les étudie d'abord en vue de déterminer s'il y a matière à brevet et quels en sont les avantages commerciaux. Ensuite, elle dépose des demandes de brevet dans divers pays pour les inventions jugées brevetables et exploitables commercialement. Pour les inventions jugées non brevetables, on peut accorder une licence indépendante à titre de technique ingénieuse ou les intégrer aux brevets d'autres inventions. La partie des frais et des redevances que la S C B E garde, sert à défrayer la Société de ses dépenses d'exploitation commerciale.

Origine des inventions

La S C B E a été créée en 1947 afin de s'occuper des inventions brevetables provenant du Conseil national de recherches du Canada (CNRC) et d'autres centres de recherches financés par le gouvernement. La promulgation, en 1954, de la Loi sur les inventions des fonctionnaires publics a eu pour effet de faire de la S C B E le principal organisme chargé de prendre des brevets et d'accorder des licences pour des inventions appartenant au gouvernement canadien.

La S C B E a également conclu des accords avec de nombreuses universités, des organismes provinciaux de recherches et d'autres établissements financés par le public, en vue de pouvoir étudier, breveter et accorder des licences pour des produits de leur propriété industrielle et intellectuelle.

Demandes d'évaluation de brevet d'invention

Au cours de l'exercice financier 1975-1976, la S C B E a reçu 254 nouvelles demandes provenant des diverses sources,

RAPPORT ANNUEL

5

DIRECTION

Président R. D. Hiscocks

Directeur général W. M. Hill

Secrétaire W. D. Gordon

Trésorier Lois Lipke

SERVICES

Commercialisation et
Licence

K. G. Lund, Chef
R. A. Pacaud
P. A. Miller
K. F. Crowe
M. T. Dasilva

Brevets

J. R. Hughes, Chef
A. A. Thomson
F. W. Lemon
R. G. Bitner
E. Rymek
W. D. Gordon, Chef
Lois Lipke, Chef
H. A. Scharf
J. F. Leman
Ministère de la Justice

CONSEILLER JURIDIQUE

Comptabilité

Administration

Contrats et Licences

VERIFICATEUR

Auditeur général du Canada

BANQUE

Banque Canadienne Impériale
de Commerce

SIEGE SOCIAL

275, rue Slater
Ottawa, Ontario
K1A 0R3

ADMINISTRATEURS

W. M. ARMSTRONG
Président, Universities Council of
British Columbia

W. M. AULD

Président, Bristol Aerospace Ltd

Msle Joan Clark

Membre, Messrs. Ogilvy, Cope,
Porteous, Montgomey, Renault,

Clarke et Kirkpatrick

P. R. GENDRON

Président, Pulp and Paper Research

Institute of Canada

W. F. GRAYDON

Président, Division du génie chimique
et chimie appliquée, Université de

Toronto

R. D. HISCOCKS

Vice-président (Industrie)

Conseil national de recherches du

Canada

D. N. KENDALL

Vice-Président, Hermes Electronics Ltd

J. C. PANSSEET

Directeur de recherche

Institut de bio-endocrinologie, inc

W. G. SCHNEIDER

Président, Conseil national de

recherches du Canada

J. SUTCLIFFE

Président, Guildline Instruments Limited

S. WAGNER

Directeur général, Sciences et

technologie,

Ministère de l'industrie et du commerce



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 11 juin 1976

L'honorable C. M. Drury,
Président du Comité de la recherche scientifique
et industrielle du Conseil privé,
Ottawa, Canada.

Monsieur le Ministre,

Conformément à l'article 75 (3) de la Loi sur
l'administration financière, j'ai l'honneur de vous présenter,
au nom du Conseil d'administration, le Rapport annuel de la
Société canadienne des brevets et d'exploitation, limitée, pour
l'exercice qui s'est terminé le 31 mars 1976, de même que l'état
des finances et le rapport de l'Auditeur général du Canada.

Veuillez agréer, Monsieur, je vous prie, l'ex-
pression de mes sentiments les meilleurs.

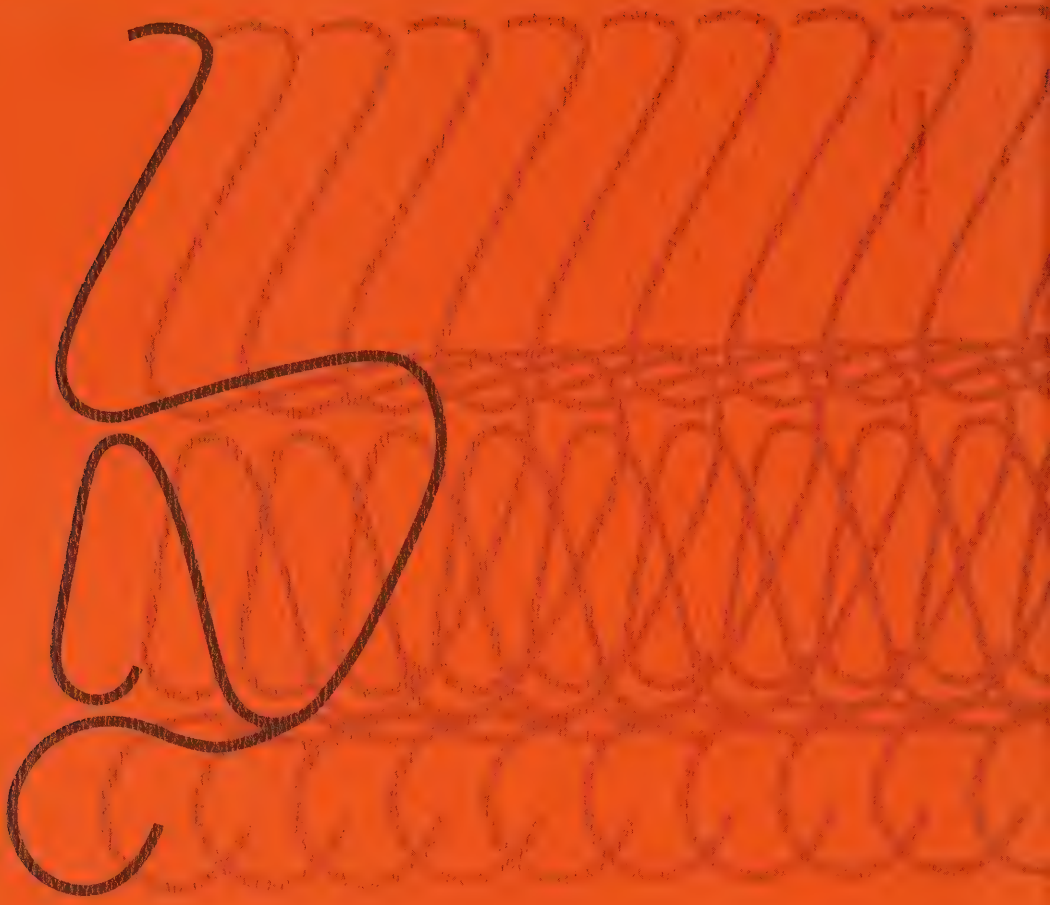
R. D. Hiscocks,
Président.

RAPPORT ANNUEL

1976

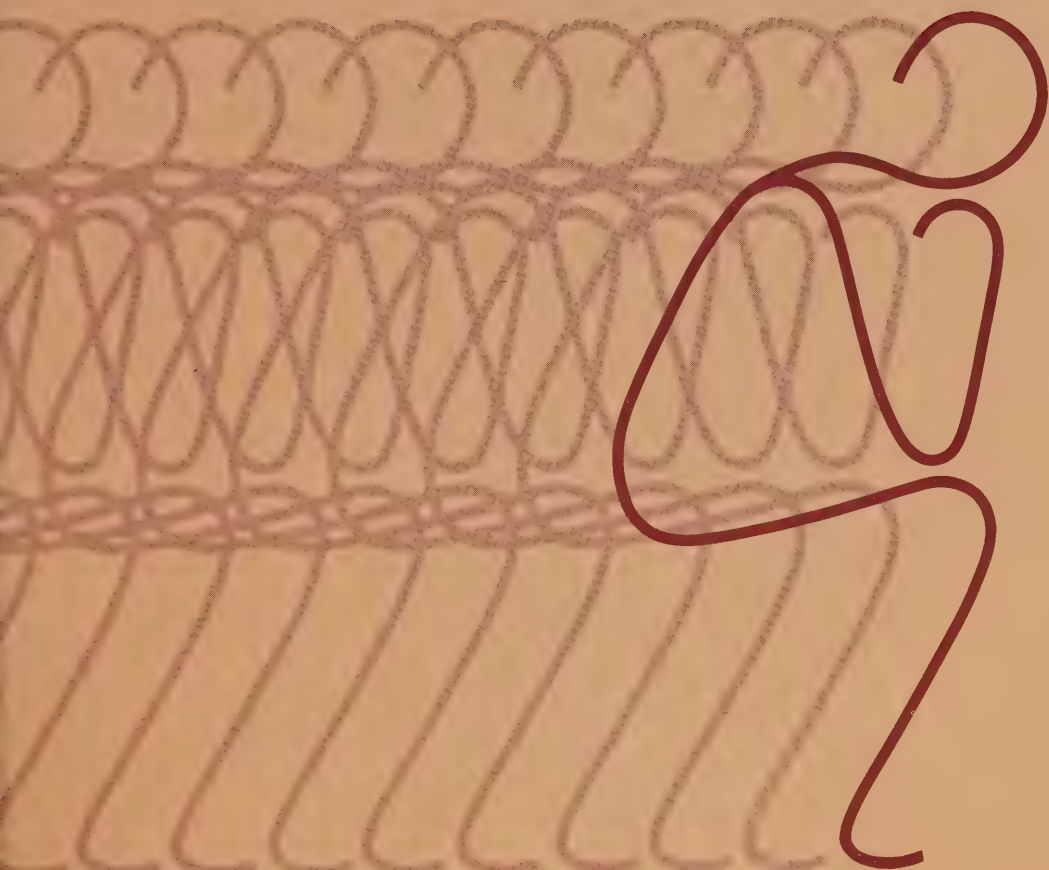
SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE

(S C B E)



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CANADIAN PATENTS AND DEVELOPMENT LIMITED

ANNUAL REPORT

1977

CANADIAN PATENTS AND DEVELOPMENT LIMITED

(C P D L)





CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 28 June 1977

The Honourable J. Hugh Faulkner, P.C., M.P.,
Minister of State for Science and Technology,
Ottawa, Canada.

Dear Mr. Faulkner,

In accordance with Section 75 (3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1976-77. The Company's Financial Statement and the Report of the Auditor General are included.

Yours sincerely,

R. D. Hiscocks,
President.

- DIRECTORS . W.M. AULD
President, Bristol Aerospace Limited
- . MISS JOAN CLARK
Member, Messrs. Ogilvy, Cope,
Porteous, Montgomery, Renault,
Clarke & Kirkpatrick
- . P.R. GENDRON
President, Pulp and Paper Research
Institute of Canada
- . W.F. GRAYDON
Chairman, Department of Chemical
Engineering and Applied Chemistry,
University of Toronto
- . R.D. HISCOCKS
Vice-President (Industry), National
Research Council of Canada
- . D.N. KENDALL
Vice-Chairman, Hermes Electronics Limite
- . J.P. KUTNEY
Department of Chemistry,
University of British Columbia
- . J.C. PANISSET
Director of Research Institute of
Bio-Endocrinology, Inc.
- . P.E. QUINN
Assistant Deputy Minister
Dept. of Industry, Trade & Commerce
- . W.G. SCHNEIDER
President, National Research Council of
Canada
- . W.R. STADELMAN
President, Ontario Research Foundation
- . J.SUTCLIFFE
President, Guildline Instruments Limited

OFFICERS

President	R.D. Hiscocks
General Manager	W.M. Hill
Secretary	W.D. Gordon
Treasurer	Lois Lipke

BRANCHES

Marketing & Licensing	K.G. Lund, Chief R. A. Pacaud P.A. Miller K.F. Crowe M.T. DaSilva
Patents	J.R. Hughes, Chief A.A. Thomson F.W. Lemon R.G. Bitner E. Rymek
Contracts and Licensing	W.D. Gordon, Chief
Administration	Lois Lipke, Chief
Accounts	H. A. Scharf

LEGAL ADVISER

J.F. Leman
Department of Justice

AUDITOR

The Auditor General of Canada

BANKERS

The Canadian Imperial Bank of
Commerce

HEAD OFFICE

275 Slater Street
Ottawa, Ontario. K1A 0R3

Canadian Patents and Development Limited (CPDL) was established to make available to the public, through licensing arrangements with industry, the industrial and intellectual property which results from publicly funded research and development.

Activities

CPDL may receive ideas and inventions from public servants in all departments of the federal government and from the professional staff and employees of universities. The ideas and inventions are first assessed for patentability and commercial use. Patent applications may then be filed in various countries in respect of those which are considered commercially exploitable and patentable. Some which are not patentable may be licensed as know-how independently, or together with patents. That portion of the license fees and royalties paid under license agreements and retained by CPDL is used to defray CPDL commercial operating expenses.

Sources of Invention

CPDL was originally established in 1947 to handle patentable material of the National Research Council of Canada (NRC) and other government-financed research. The passage of the Public Servants Inventions Act in 1954 made CPDL the prime patenting and licensing agency for public servant inventions which by that Act, belong to the Canadian Government.

CPDL has also entered into agreements with many universities, provincial research organizations, and other publicly financed institutions to assess, patent and license their industrial and intellectual property.

Disclosures

During the FY 1976-77, CPDL received 265 new disclosures from all its sources; this was 10 more than last year. Government departments and agencies provided 178 of the total disclosures, while of the remaining, 76 were received from universities, two from a provincial research organization, and 10 from other sources.

Patenting

Patent officers of C P D L continued to prepare and file a large percentage of the C P D L patent applications. Of the 49 initial applications which were filed last year, 86% were prepared by C P D L patent officers and they also prepared 89% of the 180 convention applications filed.

Inventors

The C P D L presentation to qualifying inventors of the lapel pins bearing replicas of the CPDL registered symbol "The Inventor" continued to serve as a small, but important acknowledgement of the role of the inventor in Canadian technological progress. There are now 787 inventors who have worn their pins with pride of achievement. 39 are new members of this small group, having been accredited during the past year.

Marketing and Licensing

During the FY 1976-77 the Marketing and Licensing Branch accepted 80 new cases for exploitation, an increase of 21% over last year (rather more inventions than usual were received from the Department of National Defence). 21 of the new cases or 25% comprised know-how unprotected by patent applications.

C P D L acquired from the U. S. General Signal Corporation exclusive Canadian and United States rights to an invention that affected CPDL's license on an NRC invention in the field of electrical ground fault detection.

C P D L was able to resolve a rather complicated patent ownership situation regarding extensive patent rights to processes and equipment for extracting sugar from sugar cane that the Department of Industry, Trade and Commerce had acquired for the Crown in the failure of a commercial venture the government had supported. The inventions were licensed during the past year by CPDL to two Canadian companies.

C P D L completed 30 license agreements during the year; 20 for inventions covered by patent applications; 10 for know-how only. Nine licenses were terminated.

C P D L participated again in the World Fair for Technology Exchange in Chicago, where it unveiled a new exhibition booth, (see photo, page 20). The company also exhibited at the Pacific Industrial Equipment and Materials Handling exhibition in Vancouver and the Ontario Manufacturing Opportunities Show in Toronto.

An ultra-bright light invented by Dr. Roy Nodwell and Dr. David Camm in the Department of Physics at the University of British Columbia has formed the basis of a new company, Vortek Industries Limited, which was started by the inventors and two colleagues who had been involved in the development. The lamp, now at the pre-production prototype stage, will operate at 250 Kilowatts for at least 1,000 hours.

High protein snack foods made from pea flour by Pro-Star Mills Ltd. of Saskatoon, are now being test marketed in the Toronto area and apparently are being well received.

An invention, from the Atlantic Regional Laboratory of the National Research Council of Canada, for producing carageenin by culturing marine algae on land in large tanks instead of harvesting Irish moss from the sea, has been licensed to two companies in the Maritimes.

The world energy situation has brightened the prospects of two inventions developed by the Eastern Forest Products Laboratory of the Department of the Environment. These inventions are concerned with replacing, at least partially, the phenol formaldehyde resins used in manufacturing plywood and particleboard, with materials made from spent sulphite liquor or kraft lignin, both waste products of the pulp and paper industry.

Service Function

During the FY 1976-77 C P D L also continued its service role, acting in an advisory capacity to organizations and individuals, including government departments and agencies, on patent and other matters dealing with industrial and intellectual property. The workload requires two officer man years for this activity, mainly for attending departmental meetings to discuss specific and general patent problems.

Compound Screening

The compound screening program, which was started as a drug screening program on an experimental basis in 1974, and now includes compounds other than drugs, was continued in FY 1976-77. A total of 191 compounds have been submitted for screening. Several of this number appear to have commercial potential and further testing is expected to reveal useful properties which may be exploitable.

Financial Statements

The financial statements as audited by the Auditor General of Canada indicate a net profit of \$1,945. A new expense item of \$13,500 for vacation and termination benefits has been included and the surplus has been adjusted to reflect accrued benefits from previous years.

For the first time in several years the statements reflect income and expenses on a more comprehensive basis. However, this change does not alter significantly the profit or loss position.

Staff

The C P D L staff remains at 26 and continues to provide services which are unique in government operations. These individuals are responsible for the overall operation of the Company. The challenges with which C P D L has been confronted over the past year have been met successfully by its well-motivated and well-trained staff.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS

Ottawa, June 14, 1977

The Honourable J. Hugh Faulkner, P.C. M.P.,
Minister of State for Science and Technology,
Ottawa, Ontario.

I have examined the balance sheet of Canadian Patents and Development Limited as at March 31, 1977 and the statements of surplus, income and expense, and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion these financial statements give a true and fair view of the financial position of the Company as at March 31, 1977 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied, after giving retroactive effect to the changes described in Notes 1 (d) and 1 (e) to the financial statements, on a basis consistent with that of the preceding year.

I further report that, in my opinion, proper books of accounts have been kept by the Company, the financial statements are in agreement therewith and the transactions that have come under my notice have been within its statutory powers.

sgd J. J. Macdonell
Auditor General of Canada

Statement of Income and Expense for the year ended March 31, 1977

	<u>1977</u>	<u>1976</u>
Income:		
Royalties and licensing fees (Note 1 (d))	\$ 949,562	\$ 1,070,122
Less: Awards to inventors (Note 1 (d))	79,099	86,187
Payable to third parties in accordance with agreements (note 1 (d))	<u>253,749</u>	<u>316,931</u>
	<u>332,848</u>	<u>403,118</u>
	616,714	667,004
Service charges under agency agreements	49,761	55,693
Development assistance recovered	-	44,277
Interest earned	<u>50,640</u>	<u>43,899</u>
	717,115	810,873
Expenses:		
Salaries	462,663	417,123
Patent agents' fees and other patenting costs (net)	184,594	178,656
Compound screening	96,719	100,440
Accommodation, equipment and other rentals	58,812	61,817
Provision for bad debts	35,250	29,152
Professional and special services	35,087	34,206
Travel and removal	22,700	28,979
Office supplies, printing, equipment and furnishings	21,822	23,460
Services provided by National Research Council of Canada (Note 4)	15,000	13,709
Communications	13,972	15,231
Provision for vacation pay and termination benefits	13,500	14,500
Loss on sale of investments (Note 1 (e))	3,812	-
Miscellaneous	<u>1,239</u>	<u>1,304</u>
	<u>\$965,170</u>	<u>\$ 918,577</u>
Excess of expense over income	248,055	107,704
Less: Funds provided by Parliamentary Appropriation: Science and Technology Vote 20	<u>250,000</u>	<u>150,000</u>
Amount transferred to surplus	<u>\$ 1,945</u>	<u>\$ 42,296</u>

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

Balance Sheet as at March 31, 1977

<u>Assets</u>	<u>1977</u>	<u>1976</u>
Current assets:		
Cash	\$219,585	\$ 83,469
Accounts receivable less allowance for doubtful accounts (Note 1 (d))	355,089	237,154
Interest accrued on investments	<u>4,194</u>	<u>6,944</u>
Total current assets	578,868	327,567
Investments in bonds of, or guaranteed by, Canada, at cost (market value, 1977 \$380,263; 1976 \$453,887 (Note 1 (f))	420,250	524,062
Patent rights at nominal value (Note 2)	1	1
Experimental equipment on loan to licensees, under shared development program, at nominal value (Note 3)	<u>1</u>	<u>1</u>
	<u>\$999,120</u>	<u>\$851,631</u>

The accompanying notes are an integral part of the financial statements.

Certified correct:

..... W. M. Hill
General Manager

Approved by the Board

..... W. G. Schneider
Director

Liabilities

	<u>1977</u>	<u>1976</u>
Current liabilities:		
Accounts payable	\$513,970	\$385,606
Royalties paid in advance	<u>22,480</u>	<u>5,300</u>
Total current liabilities	<u>536,450</u>	<u>390,906</u>

Shareholders' Equity

Capital stock:		
Authorized - 10,000 shares of no par value		
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus:	<u>166,471</u>	<u>164,526</u>
	462,670	460,725

\$999,120

\$851,631

Statement of Changes in Financial Position For the year ended March 31, 1977

	<u>1977</u>	<u>1976</u>
Source of Funds:		
Parliamentary appropriation	\$250,000	\$150,000
Redemption of bonds at date of maturity	<u>100,000</u>	<u>-</u>
	350,000	150,000
Application of Funds:		
Excess of expense over income	248,055	107,704
Items not requiring an outlay of funds		
Loss on sale of investments	<u>3,812</u>	<u>-</u>
	244,243	107,704
Increase in working capital during the year	105,757	42,296
Working capital deficiency, beginning of year	<u>63,339</u>	<u>105,635</u>
Working capital, end of year	<u>\$ 42,418</u>	<u>\$ (63,339)</u>

Statement of Surplus For the year ended March 31, 1977

	<u>1977</u>	<u>1976</u>
Balance at beginning of the year		
As previously reported	<u>\$163,551</u>	<u>\$127,540</u>
Accrued royalties receivable - net (Note 1 (d))	60,975	40,190
Provision for vacation and termination benefits (Note 1 (e))	<u>(60,000)</u>	<u>(45,500)</u>
	975	(5,310)
As restated	164,526	122,230
Amount transferred for the year per statement of income and expense	<u>1,945</u>	<u>42,296</u>
Balance at end of year	<u>\$166,471</u>	<u>\$164,526</u>

Notes to the Financial Statements, March 31, 1977

1. Accounting policies

(a) Industrial and intellectual property rights

Expenditures relating to the acquisition, protection, licensing and maintenance of industrial and intellectual property rights are charged to expense as incurred.

(b) Development expenditures

Expenditures for development assistance and equipment under development contracts are charged to expense as incurred and any recoveries are recorded as income in the year received.

(c) Furniture, equipment and depreciation

Expenditures for furniture and equipment are charged to expense as incurred; accordingly, no depreciation charge is recorded.

(d) Royalties

During the year the Company adopted the policy of estimating the amount of royalties receivable as at March 31, 1977 based on the operations of their licensees to that date. Previously such income was recorded only when reported by the licensee concerned. The portion of the royalties that is applicable to third parties is credited to them in accordance with the agreement under which the rights were acquired. This change in policy was applied retroactively with the result that the income for the year ended March 31, 1976 has been increased by \$20,785 over the amount previously reported and \$40,190 has been credited to operating results of years prior to 1975-76. The effect of this change for the 1976-77 year is a reduction of income amounting to \$7,825.

(e) Vacation and termination benefits

During the year the Company adopted the policy of recording in its accounts a provision for vacation and termination benefits accruing to its employees. Previously the Company had expensed actual payments when such were made. This change in accounting policy was applied retroactively with the result that the excess of expense over income for the year ended March 31,

1976 has been increased by \$14,500 over the amount previously reported and \$45,500 has been charged to operating results of years prior to 1975-76.

(f) Investments in bonds

The policy of the company is to carry investments in bonds at cost since it is Management's intention to hold the bonds to their dates of maturity as follows:

<u>Par value</u>	<u>Rate of interest</u>	<u>Maturity date</u>
\$ 25,000	7 3/4 %	October 1, 1978
100,000	5 1/2 %	August 1, 1980
50,000	4 %	February 1, 1981
250,000	6 3/4 %	February 15, 1989

Under certain market conditions sale of these investments prior to maturity would result in a loss.

2. Unexpired patent rights

To date, from 1948, approximately \$1,621,500 has been expended on unexpired patent rights for inventions.

3. Equipment purchased under development contracts

The cost of equipment purchased under active development contracts and held by a licensee amounts to \$123,500.

4. Employee benefits not charged to the Company

The National Research Council performs certain personnel functions for the Company including the payment of salaries. The Company reimburses the Council for the amount of gross salaries paid on its behalf but not with respect to the employer's share of the cost of the related employee benefits. The cost of the latter is estimated to be equivalent to 10% of gross salaries.

5. Royalties in dispute

Not reflected in the financial statements are royalties of \$166,150 in respect of prior years which were due under an agreement with a foreign licensee and had been in dispute because of differences between that licensee and certain others using the invention. The Company

has concluded an agreement with a new licensee who has undertaken to pay a like amount on the basis of future sales with any remaining unpaid balance to be due on March 31, 1978.

6. Contingent liability

A contingent liability of approximately \$36,000 exists with respect to taxes not deducted at the source from royalties remitted in prior years by a foreign licensee. However, the Company does not acknowledge any liability on its part for such taxes.

7. Executive remuneration

Salaries for 1976-77 include remuneration of directors as directors, \$1,875 (1975 - 76 - \$1,500) and remuneration of officers as officers \$83,588 (1975 - 76 - \$70,467). The Corporation has twelve directors and five officers. Two officers are also directors.



New Canadian Patents And Development Limited booth used at trade exhibitions.

ANNUAL REPORT



Le nouveau stand de la S C B E destiné aux expositions commerciales.

fonctions touchant le personnel de la S C B E, comme le paiement des salaires. La S C B E rembourse au Conseil national de recherches le montant des traitements bruts qu'il a versés au personnel de la Société canadienne des brevets. Cependant, la S C B E ne paie pas la part de l'employeur en ce qui concerne le coût des avantages sociaux accordés à son personnel. On estime que cette part de l'employeur équivaut à 10% du salaire brut.

5. Redevances en litige

Un montant de \$166,150, qui ne figure pas dans les états financiers concerne des redevances qui étaient dues en vertu d'un accord conclu avec un détenteur étranger de licence et qui s'étaient trouvées en litige à cause d'un désaccord survenu entre ce détenteur de licence et d'autres personnes utilisant l'invention. La S C B E a conclu une entente avec un nouveau détenteur de licence qui s'est engagé à verser un montant semblable sur la base des futures ventes et à régler le 31 mars 1978 tout solde impayé.

6. Passif éventuel

Un passif éventuel s'élevant à environ \$36,000 existe à l'égard d'impôts non payés à la source de redevances remises au cours d'années antérieures par un détenteur étranger de licence. Cependant, la S C B E n'accepte, quant à elle, aucune obligation de ce genre.

7. Rémunération des cadres supérieurs

Les traitements de 1976-77 comprennent la rémunération des administrateurs en tant que tels pour un montant de \$1,875 (\$1,500 en 1975-76) et la rémunération des cadres, en tant que tels, pour un montant de \$83,588 (\$70,467 en 1975-76). La S C B E a douze administrateurs et cinq cadres. Deux cadres sont également des administrateurs.

(e) Allocations de vacances et de fin d'emploi

Au cours de l'exercice considéré la S C B E a décidé de comptabiliser une provision pour les allocations de vacances et de fin d'emploi revenant à ses employés. Auparavant, la S C B E enregistrait le montant de ces allocations au moment où elles étaient versées. La nouvelle façon de procéder a été appliquée rétroactivement et il en résulte que l'excès des dépenses sur les revenus pour l'exercice terminé le 31 mars 1976 a été majoré de \$ 14,500 par rapport au montant indiqué précédemment et \$ 45,500 ont été imputés aux résultats d'exploitation d'exercices antérieurs à 1975-76.

(f) Investissements dans des obligations

La SCBE a fait des investissements dans des obligations au prix coûtant, car l'intention de la Direction est de garder ces obligations jusqu'à leur date d'échéance, comme suit:

Valeur au pair	Taux d'intérêt	Date d'échéance
\$ 25,000	7 3/4 %	1er octobre 1978
100,000	5 1/2 %	1er août 1980
50,000	4 %	1er février 1981
250,000	6 3/4 %	15 février 1989

Dans certaines conditions du marché, la vente de ces obligations avant leur date d'échéance donnerait lieu à une perte.

2. Propriété industrielle en vigueur

Depuis 1948 et jusqu'à ce jour, environ \$1,621,500 ont été dépensés à l'égard de droits en vigueur découlant de brevets d'invention.

3. Equipement acheté en vertu de contrats de développement

Le coût de l'équipement acheté en vertu de contrats actifs de développement et détenu par des détenteurs de licence s'élève à \$123,500.

4. La S C B E ne paie pas la part de l'employeur en ce

qui concerne les avantages sociaux de son personnel

Le Conseil national de recherches remplit certaines

Notes jointes aux états financiers, le 31 mars 1977

1.

Conventions comptables

(a) Droits de propriété industrielle et intellectuelle

Les dépenses pour l'acquisition, la protection et le maintien des droits de propriété industrielle et intellectuelle, ainsi que celles afférentes à l'octroi de licences, sont portées au compte des dépenses telles qu'encourues.

(b) Frais de développement

Les frais d'équipement et de soutien pour travaux effectués en vertu de contrats de développement sont portés au compte des dépenses telles qu'encourues et tout recouvrement est comptabilisé comme revenu au cours de l'exercice où il est effectué.

(c) Mobilier, équipement et amortissement

Les dépenses faites pour des meubles ou de l'équipement sont portées au compte des dépenses telles qu'encourues; par conséquent, aucun droit d'amortissement n'est enregistré.

(d) Redevances

Au cours de l'exercice considéré, la S C B E a adopté une nouvelle façon de procéder qui consiste à estimer le montant des redevances à recevoir en date du 31 mars 1977 à la lumière des opérations de ses détenteurs de licence jusqu'à cette date. Auparavant, ce revenu n'était comptabilisé que lorsque les détenteurs de licence le faisaient connaître. La part des redevances applicables à des tiers leur est créditée conformément aux dispositions de l'accord en vertu duquel les droits ont été acquis. Cette nouvelle façon de procéder a été appliquée rétroactivement et il en résulte que le revenu pour l'exercice terminé le 31 mars 1976 a été majoré de \$ 20,785 par rapport au montant indiqué précédemment et \$ 40,190 ont été crédités à des résultats d'exploitation d'exercices antérieurs à 1975-76. Ce changement entraîne, pour l'année 1976-77, une diminution des re-

venus d'un montant de \$7825.

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION, LIMITEE

Etat des changements de la situation financière pour l'exercice
terminé le 31 mars 1977

Provenance des fonds					
Crédits parlementaires	\$250,000				\$150,000
Remboursement d'obligations à leur date d'échéance	100,000				-
	350,000				150,000
Utilisation des fonds					
Excédent des dépenses sur les revenus	248,055				107,704
Postes ne requérant pas de déboursé de fonds					
Perte due à la vente d'obligations	3,812				-
	244,243				107,704
Accroissement des fonds de roulement durant l'exercice considéré	105,757				42,296
Découvert du fonds de roulement au début de l'exercice	63,339				105,635
Fonds de roulement à la fin de l'exercice	\$ 42,418				\$ (63,339)
Etat des excédents pour l'exercice terminé le 31 mars 1977					
	1977				1976
Solde au début de l'exercice	\$163,551				\$127,540
Comme rapporté précédemment					
Redevances cumulées à recevoir - montant net (Note 1 (d))	60,975				40,190
Prestations de vacances et de fin d'emploi (Note 1 (e))	(60,000)				(45,500)
	975				(5,310)
Nouvel énoncé	164,526				122,230
Montant transféré pour l'exercice considéré, selon l'état des revenus et des dépenses	1,945				42,296
Solde à la fin de l'exercice	\$166,471				\$164,526

Passif	1977	1976
Passif à court terme	\$513, 970	\$385, 606
Comptes à payer	22, 480	5, 300
Redevances payées d'avance	536, 450	390, 906
Total du passif à court terme	5999, 120	8851, 631
Avoir des actionnaires	166, 471	164, 526
Capital-actions	296, 199	460, 725
Autorisé - 10, 000 actions sans valeur		
au pair		
Emis - 5, 000 actions, entièrement payées		
Surplus		

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITEE
(Constituées en vertu de la loi sur les Corporations canadiennes)

Bilan au 31 mars 1977

<u>Actif</u>		
Actif à court terme		
Encaisse	\$219,585	1977
Comptes à recevoir moins l'allocation pour créances douteuses (Note 1 (d))	355,089	
Intérêt couru sur placements	4,194	
Total de l'actif à court terme	578,868	
Placements en obligations émises ou garanties par le Canada, au prix coûtant, (Valeur du marché: 1977 \$380,263; 1976 \$453,887 (Note 1 (f))	420,250	
Droits de brevets, valeur nominale	1	
(Note 2)		
Equipement expérimental prêté à des concessionnaires, en vertu du programme de développement à frais partagés, valeur nominale	1	
(Note 3)		
	\$999,120	1977
	\$ 851,631	1976

Les notes ci-jointes font partie intégrante des états financiers.

Certifié exact

Gestionnaire général
W. M. Hill

Approuvé par le Conseil

Administrateur
W. G. Schneider

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

État des revenus et dépenses pour l'année terminée le 31 mars 1977

1976	1977	
\$1,070,122	\$949,562	Redevances et droits de concession
86,187	79,099	de brevets (Note 1 (d))
316,931	253,749	Moins: Primes versées aux inventeurs (Note 1 (d))
403,118	332,848	A payer à des tiers conformément
667,004	616,714	aux accords (Note 1 (d))
55,693	49,761	Frais de service selon des conventions
44,277	-	de mandataire
43,899	50,640	Recouvrement de frais d'aide au
810,873	717,115	développement
		Intérêt gagné
		Dépenses:
		Traitements
417,123	462,663	Honoraires des agents de brevets
178,656	184,594	et autres frais de brevets (nets)
100,440	96,719	Enquête sur les composées
61,817	58,812	Location de locaux, équipement et autres
29,152	35,250	Mauvaises créances
34,206	35,087	Services professionnels et spéciaux
28,979	22,700	Voyage et déménagement
		Fournitures, impression, équipement et
23,460	21,822	meublier de bureau
		Services fournis par le Conseil national
13,709	15,000	de recherches du Canada (note 4)
15,231	13,972	Communications
14,500	13,500	Prestations de vacances et de fin d'emploi (Note 1 (e))
-	3,812	Perte due à la vente d'obligations
1,304	1,239	Divers
918,577	965,170	
107,704	248,055	Excédent des dépenses sur les revenus
150,000	250,000	Moins: Fonds provenant du crédit parlementaire
42,296	1,945	(crédit 20 - Sciences et technologie)
		Montant porté au surplus

Ottawa, le 14 juin 1977

L'Honorable J. Hugh Faulkner, C.P., député,
Ministre d'Etat chargé de la Science et
de la Technologie,
Ottawa (Ontario).

J'ai vérifié le bilan de la Société canadienne des brevets et d'exploitation limité au 31 mars 1977 ainsi que l'état des revenus et dépenses, l'état de surplus et l'état de l'évolution de la situation financière pour l'année terminée à cette date. Ma vérification a été effectuée conformément aux normes de vérification généralement reconnues et a comporté par conséquent les sondages et autres procédés que j'ai jugés nécessaires dans les circonstances.

A mon avis, ces états financiers présentent un aperçu juste et fidèle de la situation financière de la corporation au 31 mars 1977 ainsi que les résultats de son exploitation et l'évolution de sa situation financière pour l'année terminée à cette date selon les principes comptables généralement reconnus qui après effet rétroactif de la modification décrite dans les notes 1 (d) et 1 (e) jointes aux états financiers, ont été appliqués de la même manière qu'au cours de l'année précédente.

De plus, je déclare que la corporation, à mon avis, a tenu des livres de comptabilité appropriés, que les états financiers sont conformes à ces derniers et que les opérations dont j'ai eu connaissance ont été effectuées dans le cadre de ses pouvoirs statutaires.

L'Auditeur général du Canada
signé J. J. Macdonell

RAPPORT DE L'AUDITEUR GÉNÉRAL DU CANADA
ET
ÉTATS FINANCIERS

ou de lignine Kraft, deux résidus de l'industrie des pâtes et papiers.

Rôle consultatif

Au cours de l'exercice 1976-77 la S C B E a continué de jouer son rôle consultatif auprès de personnes et d'organismes comme les ministères et les agences du gouvernement en ce qui concerne les brevets et autres questions de propriété industrielle et intellectuelle. Cette activité a nécessité deux années-hommes de travail consistant principalement à participer à des réunions ministérielles pour discuter de problèmes de brevet de nature générale ou spécifique.

Enquête sur l'exploitabilité des composés

On a poursuivi au cours de l'exercice 1976-77 le programme d'enquête sur l'exploitabilité des composés, mis sur pied en 1974 pour étudier expérimentalement les produits pharmaceutiques. Aujourd'hui ce programme touche également des composés autres que les médicaments. C'est ainsi qu'un total de 191 composés ont fait l'objet d'essais. Plusieurs d'entre eux semblent avoir des possibilités commerciales et l'on s'attend à ce que de nouveaux essais fassent connaître des propriétés utiles qui rendraient ces composés exploitables.

Etats financiers

Les états financiers, tels que vérifiés par l'Auditeur Général du Canada, indiquent un profit net de \$1, 945. Un nouveau chef de dépense, s'élevant à \$13, 500 et s'appliquant aux congés de vacances et aux prestations de fin d'emploi, a été inclus et l'excédent budgétaire a été ajusté compte tenu des bénéfices accumulés au cours des exercices précédents.

Pour la première fois depuis plusieurs années, les états financiers rendent compte des revenus et des dépenses sur pas de façon significative la situation des profits ou des pertes.

Le personnel

Les effectifs de la S C B E comprennent toujours 26 personnes qui continuent de rendre des services uniques en leur genre aux organismes gouvernementaux. Ces personnes assument la responsabilité de la bonne marche de l'entreprise. Les départs lancés à la S C B E au cours de l'exercice 1976-77 ont été relevés avec succès par un personnel enthousiaste et compétent.

soutenue. Durant l'exercice considéré, la S C B E a octroyé à deux entreprises canadiennes des licences pour l'exploitation de ces brevets.

En 1976-77, la S C B E a conclu 30 accords de licences: 20 pour des inventions protégées par des demandes de brevet et 10 pour des inventions ingénieuses non protégées. Neuf licences ont été résiliées au cours de l'exercice considéré.

La S C B E a de nouveau participé à Chicago au Forum international des échanges technologiques où elle a inauguré son nouveau stand (voir photographie page 20). Par ailleurs, la S C B E a participé à deux expositions au Canada: celle de Vancouver avait pour thème les équipements industriels et la celle de Toronto avait pour but de faire connaître les possibilités manufacturières de l'Ontario.

Une lumière extrêmement brillante inventée par MM. Roy Nodwell et David Camm du Département de physique de l'Université de la Colombie Britannique a donné le jour à Vortek Industries Limited, entreprise fondée par les inventeurs et deux collègues ayant participé à leurs travaux. La nouvelle ampoule, qui en est au stade du prototype pré-production, pourra fonctionner pendant au moins 1000 heures à 250 kilowatts.

Des aliments légers à haute teneur en protéines, constitués par des farines de pois et fabriqués par Pro-Star Mills Ltd de Saskatoon, font actuellement l'objet d'un essai de commercialisation dans la région de Toronto. Cet essai semble concluant. Une invention du Laboratoire régional de l'Atlantique du CNRC permettant de produire de la carrageenine (extrait comestible de mousse d'Irlande) en cultivant des algues marines dans de grandes cuves sur terre au lieu de récolter la mousse d'Irlande en mer a fait l'objet de deux licences d'exploitation accordées à deux entreprises des provinces maritimes.

La situation énergétique mondiale a amélioré les perspectives d'avenir de deux inventions du Laboratoire des produits forestiers de l'Est du ministère de l'Environnement et des Pêcheries. Ces inventions permettent de remplacer, au moins partiellement, les résines à base de formaldéhyde phénolique utilisées dans la fabrication du contreplaqué et des panneaux conglomérés par des substances faites de liqueur de suifite appauvrie

soit 10 de plus que l'an dernier. Les fonctionnaires sont à l'origine de 178 demandes, 76 provenaient des universités, deux d'organismes provinciaux de recherches, et dix provenaient d'autres organismes.

Prises de brevet

Les agents de brevets de la S C B E ont continué de présenter et de déposer un pourcentage élevé des demandes de brevet. Sur les 49 demandes initiales et les 180 demandes conventionnelles déposées l'an dernier, respectivement 86% et 89% ont été présentées par les agents de brevets de la S C B E.

Les inventeurs

La S C B E a continué à souligner de façon simple, mais qui a son importance, le rôle de l'inventeur dans le progrès technique au Canada, en décernant aux inventeurs reconnus un bouton qui rappelle son symbole officiel: "l'Inventeur". Le nombre total d'inventeurs à qui fut rendu cet honneur, s'élève maintenant à 787, en comptant les 39 nouveaux de l'exercice 1976-77.

Commercialisation et octroi de licences

Au cours de l'exercice 1976-77 le Service de commercialisation et d'octroi de licences a accepté 80 nouveaux cas aux fins d'exploitation, soit une augmentation de 21% par rapport à l'exercice précédent (le ministère de la Défense nationale a soumis plus d'inventions que l'habitude). Vingt et un des nouveaux cas, soit environ 25%, étaient des inventions ingénieuses non protégées par des demandes de brevet.

La S C B E s'est procurée, auprès de la corporation General Signal des Etats-Unis, des droits canadiens et américains exclusifs pour une invention influant sur les licences que la S C B E peut octroyer sur une invention du CNRC dans le domaine de la détection des mises accidentelles à la terre de l'électricité.

La S C B E a pu résoudre un problème assez complexe de possession de brevets touchant une importante propriété industrielle à l'égard de procédés et de dispositifs d'extraction du sucre de la canne à sucre, que le ministère de l'Industrie et du Commerce avait acquise pour le compte de la Couronne lors de la faillite d'une entreprise commerciale que le gouvernement avait

La Société canadienne des brevets et d'exploitation limitée (S C B E) a été fondée dans le but de rendre accessible au public, grâce à des licences octroyées à l'industrie, les produits de la propriété industrielle et intellectuelle résultant de la recherche et du développement financés par l'État.

Champ d'action

Les idées et les inventions soumises à la S C B E peuvent provenir des fonctionnaires de tous les ministères fédéraux, ainsi que du personnel professionnel et de soutien des universités, des sociétés de la Couronne et des établissements provinciaux de recherches. La Société les étudie d'abord en vue de déterminer s'il y a matière à brevet et quels en sont les avantages commerciaux. Ensuite, elle dépose des demandes de brevet dans divers pays pour les inventions jugées brevetables et exploitables commercialement. Pour les inventions jugées non brevetables, on peut accorder une licence indépendante à titre de technique ingénieuse ou les intégrer aux brevets d'autres inventions. La partie des frais et des redevances que la S C B E garde, sert à défrayer la Société de ses dépenses d'exploitation commerciale.

Origine des inventions

La S C B E a été créée en 1947 afin de s'occuper des inventions brevetables provenant du Conseil national de recherches du Canada (CNR(C) et d'autres centres de recherches financés par le gouvernement. La promulgation, en 1954, de la Loi sur les inventions des fonctionnaires publics a eu pour effet de faire de la S C B E le principal organisme chargé de prendre des brevets et d'accorder des licences pour des inventions appartenant au gouvernement canadien.

La S C B E a également conclu des accords avec un grand nombre d'universités, d'organismes provinciaux de recherches et d'autres établissements financés par des fonds publics en vue d'évaluer et de breveter leur propriété industrielle et intellectuelle et d'établir pour elle des licences.

Demandes d'évaluation de brevet d'invention

Au cours de l'exercice financier 1976-1977, la S C B E a reçu 265 nouvelles demandes provenant de diverses sources,

DIRECTION

Président R. D. Hiscocks

Directeur général W. M. Hill

Secrétaire W. D. Gordon

Trésorier

Lois Lipke

SERVICES

Commercialisation et octroi de licences

K. G. Lund, Chef

R. A. Pacaud

P. A. Miller

K. F. Crowe

M. T. Dasilva

J. R. Hughes, Chef

A. A. Thomson

F. W. Lemon

R. G. Bitner

E. Rymek

W. D. Gordon, Chef

Lois Lipke, Chef

H. A. Scharf

J. F. Leman

Ministère de la Justice

Auditeur général du Canada

VERIFICATEUR

BANQUE Banque Canadienne Impériale

SIEGE SOCIAL

275, rue Slater
Ottawa, Ontario
K1A 0R3

ADMINISTRATEURS

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Président, Bristol Aerospace Ltd.
- MIE JOAN CLARK
Membre, Messrs. Ogilvy, Cope,
Porteous, Montgomery, Renault,
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Président, Pulp and Paper Research
Institute of Canada
- W. F. GRAYDON
Président, Division du génie chimique
et chimie appliquée, Université de
Toronto
- R. D. HISCOCKS
Vice-Président (Industrie)
Conseil national de recherches du
Canada
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la Colombie Britannique
- D. N. KENDALL
Vice-Président, Hermes Electronics Ltd.
- J. C. PANISSET
Directeur de recherche
Institut de bio-endocrinologie, inc
- P. E. QUINN
Sous-ministre adjoint
Programmes et Services
Ministère de l'Industrie et du commerce
- W. G. SCHNEIDER
Président, Conseil national de
recherches du Canada
- W. R. STADELMAN
Président, Ontario Research Foundation
- J. SUTCLIFFE
Président, Guildline Instruments Limited



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 28 juin 1977

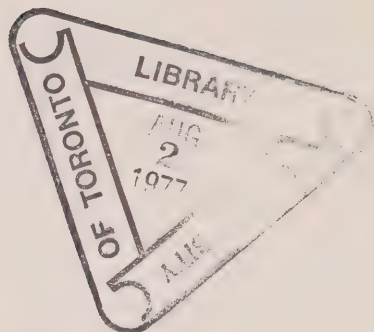
L'honorable J. Hugh Faulkner, c.p. député,
Ministre d'Etat chargé de la Science et de la
Technologie,
Ottawa, Canada.

Monsieur le Ministre,

Conformément à l'article 75 (3) de la Loi sur
l'administration financière, j'ai l'honneur de vous présenter, au
nom du Conseil d'administration, le Rapport annuel de la Société
canadienne des brevets et d'exploitation, limitée, pour l'exercice
qui s'est terminé le 31 mars 1977, de même que les états finan-
ciers et le rapport de l'Auditeur général du Canada.

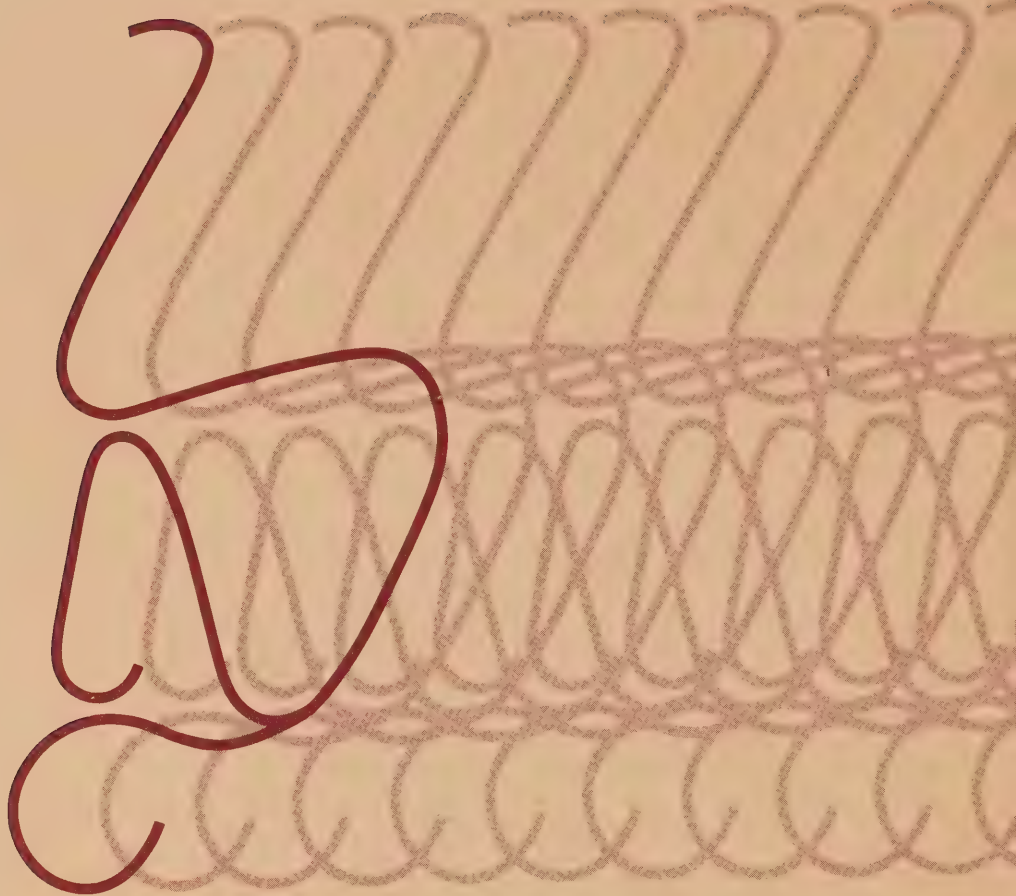
Veuillez agréer, Monsieur le Ministre, l'ex-
pression de mes sentiments les meilleurs.

R. D. Hiscocks,
Président.



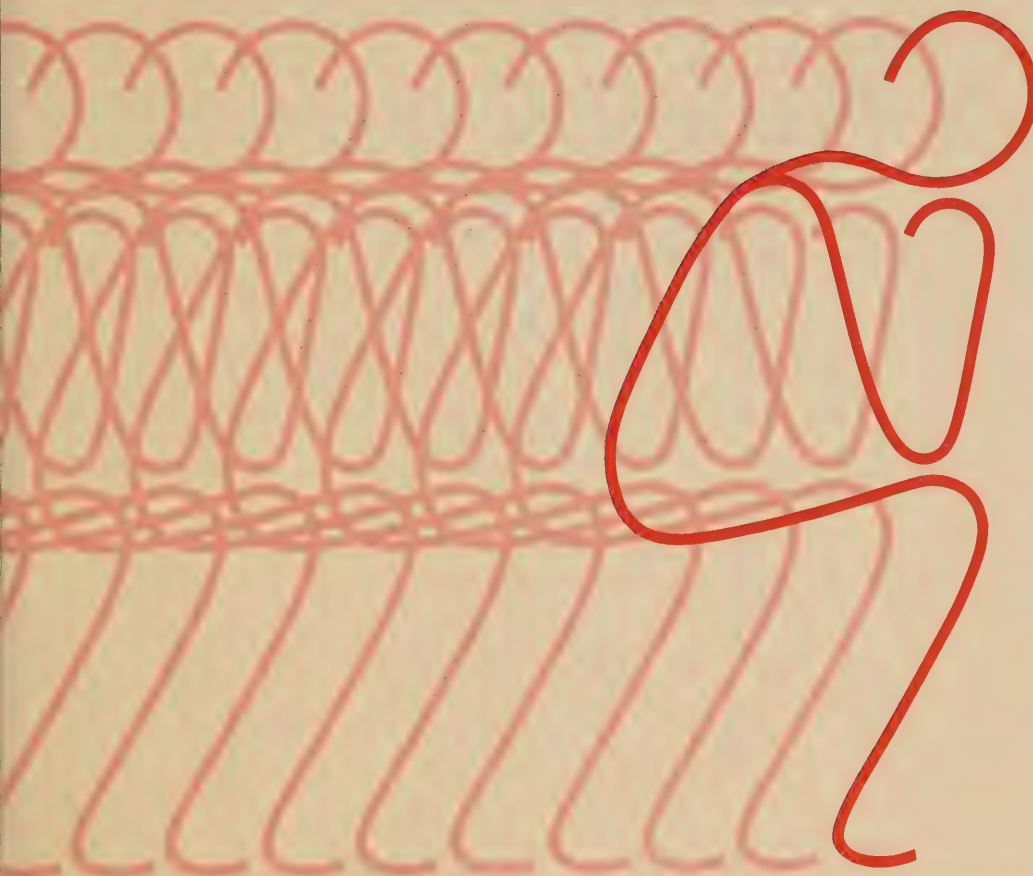
SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE
(S C B E)

RAPPORT ANNUEL 1977



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CANADIAN PATENTS AND DEVELOPMENT LIMITED

ANNUAL REPORT
1978

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(C P D L)



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, 30 June 1978

The Honourable Jack H. Horner, P.C., M.P.,
Minister of Industry, Trade and Commerce,
Ottawa, Canada.

Dear Mr. Horner,

In accordance with Section 75 (3) of the Financial Administration Act I have the honour to submit, on behalf of the Board of Directors, the Annual Report of Canadian Patents and Development Limited (CPDL) for the fiscal year 1977-78. The Company's Financial Statement and the Report of the Auditor General are included.

Yours sincerely,

R. D. Hiscocks,
President.

- DIRECTORS
- W.M. AULD
President, Bristol Aerospace Limited
 - MISS JOAN CLARK
Member, Messrs. Ogilvy, Cope,
Porteous, Montgomery, Renault,
Clarke & Kirkpatrick
 - P.R. GENDRON
President, Pulp and Paper Research
Institute of Canada
 - W.F. GRAYDON
Chairman, Department of Chemical
Engineering and Applied Chemistry,
University of Toronto
 - R.D. HISCOCKS
Vice-President (Engineering), The De Havilland
Aircraft of Canada, Limited
 - D.N. KENDALL
Chairman, Enterprise Development Board
 - J.P. KUTNEY
Department of Chemistry,
University of British Columbia
 - J.C. PANISSET
Chairman, Dept. of Medicine Faculty of
Veterinary Medicine, Univ. of Montreal
 - P.E. QUINN
Assistant Deputy Minister
Dept. of Industry, Trade & Commerce
 - W.G. SCHNEIDER
President, National Research Council Canada
 - W.R. STADELMAN
President, Ontario Research Foundation
 - * • J. SUTCLIFFE
President, Guildline Instruments Limited
* Deceased 8 October 1977

OFFICERS

President	R.D. Hiscocks
General Manager	W.M. Hill
Secretary	W.D. Gordon
Treasurer	Lois Lipke

BRANCHES

Marketing & Licensing	K.F. Crowe, Chief R. A. Pacaud P.A. Miller M.T. DaSilva
Patents	J.R. Hughes, Chief A.A. Thomson F.W. Lemon R.G. Bitner E. Rymek
Contracts and Licensing	W.D. Gordon, Chief
Administration	Lois Lipke, Chief
Accounts	H. A. Scharf
LEGAL ADVISER	Department of Justice
AUDITOR	The Auditor General of Canada
BANKERS	The Canadian Imperial Bank of Commerce
HEAD OFFICE	275 Slater Street Ottawa, Ontario. K1A 0R3

Canadian Patents and Development Limited (C P D L) was established to make available to the public, through licensing arrangements with industry, the industrial and intellectual property which results from publicly funded research and development.

Activities

C P D L may receive ideas and inventions from public servants in all departments of the federal government and from the professional staff and employees of universities. The ideas and inventions are first assessed for patentability and commercial use. Patent applications may then be filed in various countries in respect of those which are considered commercially exploitable and patentable. Some which are not patentable may be licensed as know-how independently, or together with patents. That portion of the license fees and royalties paid under license agreements and retained by C P D L is used to defray C P D L commercial operating expenses.

Operations

C P D L , in carrying out its responsibilities in the financial year 1977-78, has endeavoured to maintain the averages it experienced in past years regarding assessment of inventions, the filing of patent applications and the licensing of industrial and intellectual property. Bill C-26, an Act respecting the organization of certain scientific activities of the Government of Canada, received Royal assent on 29 June 1977. The Sections of the Act dealing with the transfer of the shares of CPDL from the National Research Council of Canada to the Minister of Industry, Trade and Commerce were not proclaimed during the financial year, but it is expected that the transfer will be effected some time in the near future.

With the transfer of the shares, C P D L will report to Parliament through the Minister, as a full Agency Corporation under Schedule C to the Financial Administration Act. In anticipation of this transfer a Task Force, chaired by an officer of the Department of Industry, Trade and Commerce, was established to consider the problems C P D L might encounter regarding administration, finances and personnel, and to recommend solutions that could be arranged prior to the effective date of the change over. While the recommendations have been made to the Minister, the new policies

cannot be put into practice until the Act is proclaimed and they will be dealt with in subsequent Annual Reports.

Staff

C P D L continues to have the support of a conscientious and well-trained staff. Mr. K. G. Lund, formerly the Chief of Marketing and Licensing, took a position with NRC in its newly established Solar Energy Project. Mr. K. F. Crowe was appointed to fill the position of Chief of Marketing and Licensing.

REPORT OF THE AUDITOR GENERAL
AND
FINANCIAL STATEMENTS

Ottawa, May 31, 1978

The Honourable Jack H. Horner, P.C., M.P.,
Minister of Industry, Trade and Commerce,
Ottawa, Ontario.

I have examined the balance sheet of Canadian Patents and Development Limited as at March 31, 1978 and the statements of surplus, income and expense and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances, except as noted below.

I was unable to satisfy myself concerning the amount of royalty income set forth in the statement of income and expense because of the inadequacies of the system to verify royalties earned and reported.

In my opinion, except for the effect of any adjustments which might have been required had I been able to satisfy myself with respect to the amount of royalty income, these financial statements give a true and fair view of the financial position of the Company as at March 31, 1978 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

I further report that, except for the failure to apply adequate procedures to check the accuracy of royalties earned as reported by licensees, in my opinion, proper books of account have been kept by the Company, the financial statements are in agreement therewith and the transactions that have come under my notice have been within its statutory powers.

sgd J. J. Macdonell

Auditor General of Canada

CANADIAN PATENTS AND DEVELOPMENT LIMITED

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Statement of Income and Expense for the year ended March 31, 1978

	<u>1978</u>	<u>1977</u>
Royalties Income	\$ 782,003	\$ 949,562
Less: Awards to inventors	61,695	79,099
Payable to third parties in accordance with agreements	<u>243,968</u>	<u>253,749</u>
	<u>305,663</u>	<u>332,848</u>
	476,340	616,714
Other Income		
Service charges under agency agreements	49,084	49,761
Interest on investments	50,280	50,640
Interest charged on overdue accounts	12,543	-
Miscellaneous	<u>4,368</u>	<u>-</u>
	<u>116,275</u>	<u>100,401</u>
	<u>592,615</u>	<u>717,115</u>
Expense		
Salaries and employee benefits (Note 6)	521,169	476,163
Patent agents' fees and other patenting expenses (Note 7)	140,001	184,594
Evaluation of compounds	106,146	96,719
Professional and special services	64,380	50,087
Accommodation, equipment and other rentals	60,059	58,812
Office supplies, printing, equipment and furnishings	25,300	21,822
Travel and removal	18,557	22,700
Communications	15,672	13,972
Bad debts expense	13,640	35,250
Loss on sale of investments	-	3,812
Miscellaneous	<u>7,154</u>	<u>1,239</u>
	<u>972,078</u>	<u>965,170</u>
Excess of Expense over Income	<u>\$ 379,463</u>	<u>\$ 248,055</u>

The accompanying notes are an integral part of the financial statements.

CANADIAN PATENTS AND DEVELOPMENT LIMITED
(Incorporated under the Canada Corporations Act)

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Balance Sheet as at March 31, 1978

<u>Assets</u>	<u>1978</u>	<u>1977</u>
Current		
Cash	\$ 576	\$ 219,585
Short-term investments in term deposits	170,000	-
Accounts receivable	255,526	355,089
Interest accrued on investments	<u>4,219</u>	<u>4,194</u>
	430,321	578,868
Investments in bonds (market value, 1978 \$375,063; 1977 \$380,263) (Note 3)	420,250	420,250
Patent rights at nominal value (note 4)	1	1
Experimental equipment on loan to licensee at licensee at nominal value (Note 5)	1	1
	<u>\$ 850,573</u>	<u>\$ 999,120</u>

The accompanying notes are an integral part of the financial statements

Certified correct

W.M. Hill
.....
General Manager

Approved by the Board

W.G. Schneider
.....
Director

Liabilities

	<u>1978</u>	<u>1977</u>
Current		
Accounts payable and accrued liabilities	\$ 438,405	\$ 468,470
Royalties paid in advance	<u>32,861</u>	<u>22,480</u>
	471,266	490,950
Provision for employee termination benefits	<u>46,100</u>	<u>45,500</u>
	517,366	536,450

Equity of Canada

Capital stock		
Authorized - 10,000 shares of no par value	-	-
Issued - 5,000 shares, fully paid	296,199	296,199
Surplus	<u>37,008</u>	<u>166,471</u>
	<u>333,207</u>	<u>462,670</u>
	<u>\$ 850,573</u>	<u>\$ 999,120</u>

Statement of Changes in Financial Position for the year ended March 31, 1978

	<u>1978</u>	<u>1977</u>
Funds provided		
Parliamentary appropriation	\$ 250,000	\$ 250,000
Redemption of bonds at date of maturity	<u>-</u>	<u>100,000</u>
	<u>250,000</u>	<u>350,000</u>
Funds applied		
Excess of expense over income	379,463	248,055
Items not requiring an outlay of funds		
Loss on sale of investments	-	3,812
Increase in provision for employee termination benefits	<u>600</u>	<u>10,000</u>
	<u>378,863</u>	<u>234,243</u>
Increase (decrease) in working capital during the year	(128,863)	115,757
Working capital (deficiency), beginning of the year	<u>87,918</u>	<u>(27,839)</u>
Working capital (deficiency), end of the year	<u>\$ (40,945)</u>	<u>\$ 87,918</u>

The accompanying notes are an integral part of the financial statements.

Statement of Surplus for the year ended March 31, 1978

	<u>1978</u>	<u>1977</u>
Balance at beginning of the year	\$ 166,471	\$ 164,526
Funds provided by Parliamentary		
Appropriation: Science and Technology Vote 20	250,000	250,000
Less: Excess of expense over income	<u>379,463</u>	<u>248,055</u>
	<u>(129,463)</u>	<u>1,945</u>
Balance at end of the year	<u>\$ 37,008</u>	<u>\$ 166,471</u>

The accompanying notes are an integral part of the financial statements.

Notes to Financial Statements, March 31, 1978

1. Objectives and operations of the Company

Canadian Patents and Development Limited was established to make available to the public through licensing arrangements with industry, the industrial and intellectual property which results from publicly-funded research and development.

The Company receives and processes industrial and intellectual property under arrangements with Federal Government Departments, Crown Corporations and Agencies, universities, and other publicly financed institutions. Suitable protection is sought in Canada and other countries for such property in instances where there is a promise of commercial use. In respect of money received from the exploitation of such property, the Company pays awards to public servants under the Public Servants Inventions Act and makes payments to other originators of such property in accordance with the agreements entered into with them.

2. Significant accounting policies

Industrial and intellectual property rights

Expenditures relating to the acquisition, protection, licensing and maintenance of industrial and intellectual property rights are charged to expense as incurred.

Development expenditures

Expenditures for development assistance and equipment under development contracts are charged to expense as incurred and any recoveries are recorded as income in the year received.

Royalties

The Company estimates the amount of royalties receivable as at the year-end, based on the operations of their licensees to that date. The portion of the royalties that is applicable to third parties is credited to them in accordance with the agreement under which the rights were acquired.

Service charges on overdue accounts

The Company effects a service charge of 1% per month on the overdue portion of accounts receivable.

Investment in bonds

The Company carries investments in bonds at cost since it is management's intention to hold the bonds to their dates of maturity. Differences between cost and par value are not amortized over the life of the bonds.

3. Investment in bonds

Details relating to the investments in bonds are as follows:

<u>Par Value</u>	<u>Interest Rate</u>	<u>Maturity Date</u>	<u>Cost</u>	<u>Market Value</u>
\$ 25,000	7-3/4%	Oct.1,1978	\$ 25,000	\$ 24,913
100,000	5-1/2%	Aug.1,1980	103,750	94,100
50,000	4%	Feb.1,1981	44,000	44,800
<u>250,000</u>	6-3/4%	Feb.15,1989	<u>247,500</u>	<u>211,250</u>
<u>\$425,000</u>			<u>\$420,250</u>	<u>\$ 375,063</u>

4. Unexpired patent rights

To date, from 1948, approximately \$1,582,645 has been expended on the current inventory of unexpired patent rights for inventions.

5. Equipment purchased under development contracts

The cost of equipment purchased under active development contracts and held by a licensee amounts to \$123,500.

6. Employee benefits not charged to the Company

The National Research Council performs certain personnel functions for the Company including the payment of salaries.

The Company reimburses the Council for the amount of gross salaries paid on its behalf but not with respect to the employer's share of the cost of certain of the related employee benefits. The cost of the latter is estimated to be equivalent to 13% of gross salaries.

7. Patent agents' fees and other patenting expenses

The Company incurs expense with respect to obtaining and maintaining patents on inventions. Some of this expense is recoverable. A summary for the year is as follows:

	<u>1978</u>	<u>1977</u>
Gross expense	\$ 291,117	\$ 316,910
Recovery	<u>151,116</u>	<u>132,316</u>
Net expense	<u>\$ 140,001</u>	<u>\$ 184,594</u>

8. Executive remuneration

Salaries for 1978 include remuneration of directors as directors \$ 2,125 (1977 - \$1,875) and remuneration of officers as officers \$90,936 (1977 - \$83,588). Nine of the twelve directors and three of the five officers received executive remuneration. Two officers are also directors.

9. Unrecorded royalties receivable

Due to uncertainties of collection there has not been reflected in the financial statements the unpaid portion of royalties amounting to \$166,150 with respect to the prior years operations of a foreign licensee which had been in dispute because of differences between that licensee and others using the invention. In 1973 a five year agreement was entered into with a new foreign licensee who agreed to pay the outstanding amount on the basis of future sales with the unpaid balance as at March 31, 1978 to be remitted thirty days after that date. Since the new licensee did not make any payments up to March 31, 1978, the full amount became due and remains unpaid at the time of preparing the 1978 financial statements. Any amounts received by the Company from the licensee may result

in a payment to the inventor of up to 15% of such amounts received in accordance with the Public Servants Inventions Act.

10. Legislation affecting ownership of the Company

Legislation to effect the transfer of ownership and the reporting relationship of the Company from the Minister of State for Science & Technology to the Minister of Industry, Trade and Commerce was passed by Parliament in June 1977, but was not Proclaimed until May 1, 1978. With the coming into force of this legislation, Bill C-26, the shares registered on the share register of the Company in the name of the Council are transferred to the Minister of Industry, Trade and Commerce.

11. Comparative Figures

Certain of the 1977 comparative figures have been reclassified to conform with the presentation adopted in 1978.

d'années antérieures d'un détenteur de licence étranger ayant eu un litige à cause d'un différend existant entre lui et d'autres personnes utilisant la même invention. Une entente de cinq ans a été conclue avec un nouveau détenteur de licence étranger en vertu de laquelle ce détenteur s'est engagé à payer le montant échû sur la base des ventes futures, le solde impayé au 31 mars 1978 devait être envoyé dans les trente jours après cette date. Etant donné que le nouveau détenteur n'a fait aucun paiement jusqu'au 31 mars 1978, le montant intégral est devenu exigible et il était impayé au moment de la préparation des états financiers de 1977-78. Conformément aux dispositions de la Loi sur les inventions des fonctionnaires, jusqu'à 15% de tout montant envoyé à la SCBFL par ce détenteur de licence devra être versé à l'inventeur.

10. Législation concernant la propriété de la SCBFL

Une loi permettant de transférer la propriété et la dépendance de la SCBFL du ministre d'Etat chargé des Sciences et de la Technologie au ministre de l'Industrie et du Commerce a été adoptée au Parlement en juin 1977 mais elle ne devait être proclamée que le 1^{er} mai 1978. Lorsque le Bill C-26 prendra force de loi les actions inscrites au registre de la SCBFL au nom du Conseil national de recherches seront transférées au nom du ministre de l'Industrie et du Commerce.

11. Chiffres comparatifs

Certains des chiffres de l'année 1977 ont été reclassifiés afin de les rendre conformes à la présentation adoptée en 1978.

développement et détenu par des détenteurs de licence s'élève à \$123,500.

6. Prestations aux employés non imputés à la SCBEL

Le Conseil national de recherches remplit certaines fonctions touchant le personnel de la SCBEL, y compris le paiement des salaires. La SCBEL rembourse au Conseil le montant des salaires bruts. Cependant, la SCBEL ne paie pas la part de l'employeur en ce qui concerne le coût de certaines des prestations aux employés. On estime que cette part équivaut à 13% du salaire brut.

7. Honoraires des agents de brevet et autres dépenses connexes

La SCBEL encourt des dépenses pour obtenir et maintenir les brevets d'invention. Une partie de ces dépenses est recouvrable. Voici le sommaire de ces transactions pour l'année:

1978		1977	
Dépenses brutes		Dépenses brutes	
\$ 291,117		\$ 316,910	
151,116		132,316	
Dépenses nettes		Dépenses nettes	
\$ 140,001		\$ 184,594	

8. Rémunération des membres de la haute direction

Les traitements de 1978 comprennent la rémunération des administrateurs en tant que tels: \$2,125 (\$1,875 en 1977) et celle des cadres supérieurs en tant que tels: \$90,936 (\$83,588 en 1977). Neuf des douze administrateurs et trois des cinq cadres supérieurs ont touché la rémunération destinée aux membres de la haute direction. Deux cadres supérieurs sont également des administrateurs.

9. Redevances à recevoir non enregistrées

Par suite d'invertititudes en matière de recouvrement, on n'a pas enregistré dans les états financiers la part non payée de redevances s'élevant à \$16,150 et concernant les opérations

fin de l'année selon les opérations de ses détenteurs de licence jusqu'à cette date. La tranche des redevances s'appliquant à des tiers leur est créditée conformément aux dispositions de l'accord en vertu duquel les droits ont été acquis.

Intérêt sur les comptes en souffrance

La SCBEL exige un intérêt de 1% par mois sur la partie échue non payée des comptes à recevoir.

Placements en obligations

La SCBEL comptabilise ses placements en obligations au prix coûtant, car l'intention de la Direction est de garder ces obligations jusqu'à leur date d'échéance. Les différences entre le coût et la valeur au pair ne sont pas amorties durant la vie des obligations.

Placements en obligations

Voici le détail de ces placements:

Valeur au pair	Taux	Date	Coût	Valeur marchande
	d'intérêt	d'échéance		
\$ 25,000	7 3/4%	1 ^{er} oct. 1978	\$ 25,000	\$ 24,913
100,000	5 1/2%	1 ^{er} août 1980	103,750	94,100
50,000	4	1 ^{er} fév. 1981	44,000	44,800
250,000	6 3/4%	15 fév. 1989	247,500	211,250
\$425,000			\$420,250	\$375,063

4. Propriété industrielle en vigueur

Depuis 1948 et jusqu'à ce jour, environ \$1,582,645 ont été consacrés à l'inventaire de la propriété industrielle découlant d'inventions.

5. Equipement acheté en vertu de contrats de développement

Le coût de l'équipement acheté en vertu de contrats actifs de

Notes jointes aux états financiers pour l'année terminée le 31 mars 1978

1.

Objectifs et opérations de la société

La Société canadienne des brevets et d'exploitation Limitée (SCBEL) a été fondée dans le but de rendre accessible au public, grâce à des licences négociées avec l'industrie, la propriété industrielle et intellectuelle résultant des recherches et développements financés par des fonds publics.

La SCBEL reçoit et traite la propriété industrielle et intellectuelle en vertu d'ententes conclues avec les ministères du gouvernement fédéral, les société et les agences de la Couronne, les universités et autres organismes financés par des fonds publics. Une protection adéquate est recherchée au Canada et à l'étranger pour la propriété industrielle et intellectuelle lorsqu'elle peut avoir des applications commerciales. La SCBEL se sert du revenu de l'exploitation de cette propriété pour récompenser les fonctionnaires inventeurs conformément à la Loi sur les inventions des fonctionnaires et pour indemniser d'autres initiateurs de propriété industrielle ou intellectuelle conformément aux ententes conclues avec eux.

2.

Conventions comptables importantes

Droits de propriété industrielle et intellectuelle
Les dépenses relatives à l'acquisition, à la protection et au maintien des droits de propriété industrielle et intellectuelle ainsi que celles relatives à l'octroi des licences sont portées aux dépenses lorsqu'elles sont encourues.

Frais de développement

Les frais de soutien et d'équipement pour travaux effectués en vertu de contrats de développement sont portés aux dépenses lorsqu'ils sont encourus et tout recouvrement est comptabilisé comme revenu au cours de l'année où il est encaissé.

Redevances

La SCBEL estime le montant des redevances à recevoir à la

SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION, LIMITÉE

État de l'évolution de la situation financière pour l'année terminée le 31 mars 1978

Provenance des fonds			
		1978	1977
Crédits parlementaires	\$ 250,000		\$ 250,000
Remboursement d'obligations à l'échéance	-		100,000
		250,000	350,000
Utilisation des fonds			
Excédent des dépenses sur les revenus	379,463		248,055
Éléments n'impliquant aucune sortie de fonds			
Perte sur la vente de placements	-		3,812
Augmentation de la provision pour indemnités de cessation d'emploi	600		10,000
	378,863		234,243
Augmentation (diminution) du fonds de roulement au cours de l'année	(128,863)		115,757
Fonds de roulement (déficitaire) au début de l'année	87,918		(27,839)
Fonds de roulement (déficitaire) à la fin de l'année	\$ (40,945)		\$ 87,918
Les notes ci-jointes font partie intégrante des états financiers.			
État de l'excédent pour l'année terminée le 31 mars 1978			
		1978	1977
Solde au début de l'année	\$ 166,471		\$ 164,526
Fonds provenant de crédits parlementaires:			
crédit n° 20 consacré aux sciences et à la technologie	250,000		250,000
Moins: excédent des dépenses sur les revenus	379,463		248,055
	(129,463)		1,945
Solde à la fin de l'année	\$ 37,008		\$ 166,471

Les notes ci-jointes font partie intégrante des états financiers.

Passif

A court terme

Comptes à payer et passif couru

Redevances payées d'avance

Provision pour prestations de
cessation d'emploi

Avoir du Canada

Capital-actions

Autorisé - 10,000 actions sans
valeur au pair

Emis - 5,000 actions
entièrement payées

Excédent

1978	1977
\$ 438,405	\$ 468,470
32,861	22,480
471,266	490,950
46,100	45,500
517,366	536,450
Avoir du Canada	
Capital-actions	
Autorisé - 10,000 actions sans valeur au pair	
Emis - 5,000 actions entièrement payées	
37,008	166,471
333,207	462,670
\$ 850,573	\$ 999,120

Bilan au 31 mars 1978

Actif

A court terme		
Encaisse	\$ 576	\$ 219,585
Certificats de dépôt à terme	170,000	-
Comptes à recevoir	255,526	355,089
Intérêts courus sur placements	4,219	4,194
	430,321	578,868
Placements en obligations (valeur marchande, 1978 \$375,063; 1977 \$380,263) (Note 3)	420,250	420,250
Droits des brevets, valeur nominale (Note 4)	1	1
Matériel expérimental prêté aux bénéficiaires de licence, valeur nominale (Note 5)	1	1
	\$850,573	\$ 999,120

Les notes ci-jointes font partie intégrante des états financiers.

Certifié exact

Directeur général
W. M. Hill

Approuvé par le Conseil

Administrateur
W. G. Schneider

État des revenus et dépenses pour l'année terminée le 31 mars 1978

11

Revenus de redevances	\$ 782,003	\$ 949,562
Moins: Récompenses versées aux inventeurs	61,695	79,099
Sommes payables à des tiers conformément aux ententes	243,968	253,749
	305,663	332,848
	476,340	616,714
Autres revenus		
Versements pour services rendus en vertu d'ententes de mandataires	49,084	49,761
Intérêt sur placements	50,280	50,640
Intérêts sur comptes en souffrance	12,543	-
Divers	4,368	-
	116,275	100,401
	592,615	717,115
Dépenses		
Traitements et prestations aux employés (Note 6)	521,169	476,163
Honoraires des agents de brevet et autres dépenses connexes (Note 7)	140,001	184,594
Évaluation des composés	106,146	96,719
Services professionnels et spéciaux	64,380	50,087
Location de locaux, d'équipement et autres	60,059	58,812
Fournitures de bureau, imprimerie, équipement et aménagement	25,300	21,822
Voyages et déménagements	18,557	22,700
Communications	15,672	13,972
Mauvaises créances	13,640	35,250
Perte sur la vente de placements	-	3,812
Frais divers	7,154	1,239
	972,078	965,170
Excédent des dépenses sur les revenus	\$ 379,463	\$ 248,055

Les notes ci-jointes font partie intégrante des états financiers.

Ottawa, le 31 mai 1978

L'honorable Jack H. Horner, C.P., député,
Ministre de l'Industrie et du Commerce,
Ottawa, Ontario.

J'ai vérifié le bilan de la Société canadienne des brevets et d'exploitation limitée au 31 mars 1978 ainsi que l'état de l'excédent, l'état des revenus et dépenses et l'état de l'évolution de la situation financière pour l'année terminée à cette date. Ma vérification a été effectuée conformément aux normes de vérification généralement reconnues, et a comporté par conséquent les sondages et autres procédés que j'ai jugés nécessaires dans les circonstances, à l'exception de ce qui suit.

Je n'ai pu m'assurer du montant des revenus de redevances démontrés à l'état des revenus et dépenses étant donné l'insuffisance du système de contrôle qui aurait pu permettre la vérification des redevances gagnées et déclarées.

À mon avis, à l'exception de tout redressement qui aurait pu être exigé si j'avais pu m'assurer du montant des revenus de redevances, ces états financiers présentent un aperçu juste et fidèle de la situation financière de la société au 31 mars 1978 ainsi que les résultats de son exploitation et l'évolution de sa situation financière pour l'année terminée à cette date selon les principes comptables généralement reconnus, appliqués de la même manière qu'au cours de l'année précédente.

De plus, je déclare que la société, à mon avis, à l'exception d'utiliser des procédés suffisants pour vérifier l'exactitude des redevances gagnées et rapportées par les détenteurs de licence, a tenu des livres de comptabilité appropriés, que les états financiers sont conformes à ces derniers et que les opérations dont j'ai eu connaissance ont été effectuées dans le cadre de ses pouvoirs statutaires.

Le Vérificateur général du Canada
signé J. J. Macdonell

RAPPORT DE L'AUDITEUR GÉNÉRAL DU CANADA
ET
ÉTATS FINANCIERS

financière. En prévision de ce transfert, un groupe de travail dirigé par un cadre du ministère de l'Industrie et du Commerce a été formé pour étudier les problèmes que la S C B E pourrait rencontrer dans les domaines de l'administration, des finances et du personnel. Ce groupe devra également recommander des solutions réalisables avant la date d'entrée en vigueur du nouveau statut. Bien que des recommandations aient été soumises au ministre de l'Industrie et du Commerce, les nouvelles politiques de la S C B E ne pourront pas être appliquées tant que la loi en question n'aura pas été promulguée. Nous en reparlerons dans nos prochains rapports annuels.

Le personnel

La S C B E continue de bénéficier des services de son personnel compétent et consciencieux. M. K. G. Lund, précédemment directeur de la commercialisation et octroi de licences, travaille maintenant pour le programme d'énergie solaire récemment mis sur pied par le Conseil national de recherches. Son successeur au poste de directeur de la commercialisation et octroi de licences est M. K. F. Crowe.

La Société canadienne des brevets et d'exploitation, limitée (S C B E) a été fondée dans le but de rendre accessible au public, grâce à des accords de licence conclus avec l'industrie, la propriété industrielle et intellectuelle résultant des recherches et développements financés par l'Etat.

Activités

Les idées et les inventions soumises à la S C B E peuvent provenir des fonctionnaires de tous les ministères fédéraux ainsi que des professeurs et des employés des universités. Elles font l'objet d'une première évaluation touchant leur brevetabilité et leurs possibilités commerciales. Des demandes de brevet sont ensuite déposées dans divers pays pour les inventions jugées brevetables et exploitables commercialement. Certaines inventions non brevetables peuvent donner lieu à une licence indépendante pour savoir-faire spécial ou bien encore, elles peuvent être intégrées à une licence découlant d'un brevet d'invention. La partie des droits perçus en vertu d'accords de licence et des redevances que la S C B E garde sert à couvrir ses frais d'exploitation commerciale.

Opérations

Au cours de l'exercice 1977-78, la S C B E s'est efforcée, dans le cadre de ses responsabilités, de maintenir les moyennes enregistrées dans le passé en ce qui concerne l'évaluation des inventions, le dépôt des demandes de brevet et la délivrance de licences découlant de la propriété industrielle et intellectuelle. Le projet de loi C-26 concernant l'organisation de certaines activités scientifiques du gouvernement fédéral a reçu la sanction royale le 29 juin 1977. Les dispositions de cette loi ayant trait aux actions statutaires de la S C B E, actuellement détenues par le Conseil national de recherches mais qui devraient être transférées au ministre de l'Industrie et du Commerce, n'ont pas été appliquées au cours de l'exercice considéré, bien qu'il y ait tout lieu de croire que le transfert aura lieu dans un proche avenir.

Lorsque ses actions statutaires auront été ainsi transférées, la Société canadienne des brevets et d'exploitation, limitée compte au Parlement par l'intermédiaire du ministre de l'Industrie et du Commerce. La S C B E deviendra alors une Agence à part entière de catégorie C en vertu de la Loi sur l'administration

DIRECTION	Président	R. D. Hiscocks
	Directeur général	W. M. Hill
	Secrétaire	W. D. Gordon
SERVICES	Tresorier	Lois Lipke
	Commercialisation et octroi de licences	K. F. Crowe, Chef R. A. Pacaud P. A. Miller M. T. DaSilva
	Brevets	J. R. Hughes, Chef A. A. Thomson F. W. Lemon R. G. Bitner E. Rymek W. D. Gordon, Chef Lois Lipke, Chef H. A. Scharf Ministère de la Justice
VERIFICATEUR		Auditeur général du Canada
BANQUE		Banque Canadienne Impériale de Commerce
SIEGE SOCIAL		275, rue Slater Ottawa, Ontario K1A 0R3

ADMINISTRATEURS

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British Columbia

W. M. AULD

Président, Bristol Aerospace Ltd

Mlle Joan Clark

Membre, Messrs. Ogilvy, Cope,

Porteous, Montgomery, Renault,

Clarke et Kirkpatrick

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Faculté de médecine vétérinaire, Univ. de Montréal

P. E. QUINN

Sous-ministre adjoint

Programmes et Services

Ministère de l'Industrie et du commerce

W. G. SCHNEIDER

Président, Conseil national de

recherches du Canada

*

J. SUTCLIFFE

Président, Guildline Instruments Limited

*Décédé 8 octobre 1977



CANADIAN PATENTS AND DEVELOPMENT LIMITED
SOCIÉTÉ CANADIENNE DES BREVETS ET D'EXPLOITATION LIMITÉE

Ottawa, le 30 juin 1978

L'honorable Jack H. Horner, c.p. député,
Ministre de l'Industrie et Commerce
Ottawa, Canada.

Monsieur le Ministre,

Conformément à l'article 75 (3) de la Loi sur
l'administration financière, j'ai l'honneur de vous présenter, au
nom du Conseil d'administration, le Rapport annuel de la Société
canadienne des brevets et d'exploitation, limitée, pour l'exercice
qui s'est terminé le 31 mars 1978, de même que les états finan-
ciers et le rapport de l'Auditeur général du Canada.

Veuillez agréer, Monsieur le Ministre, l'ex-
pression de mes sentiments les meilleurs.

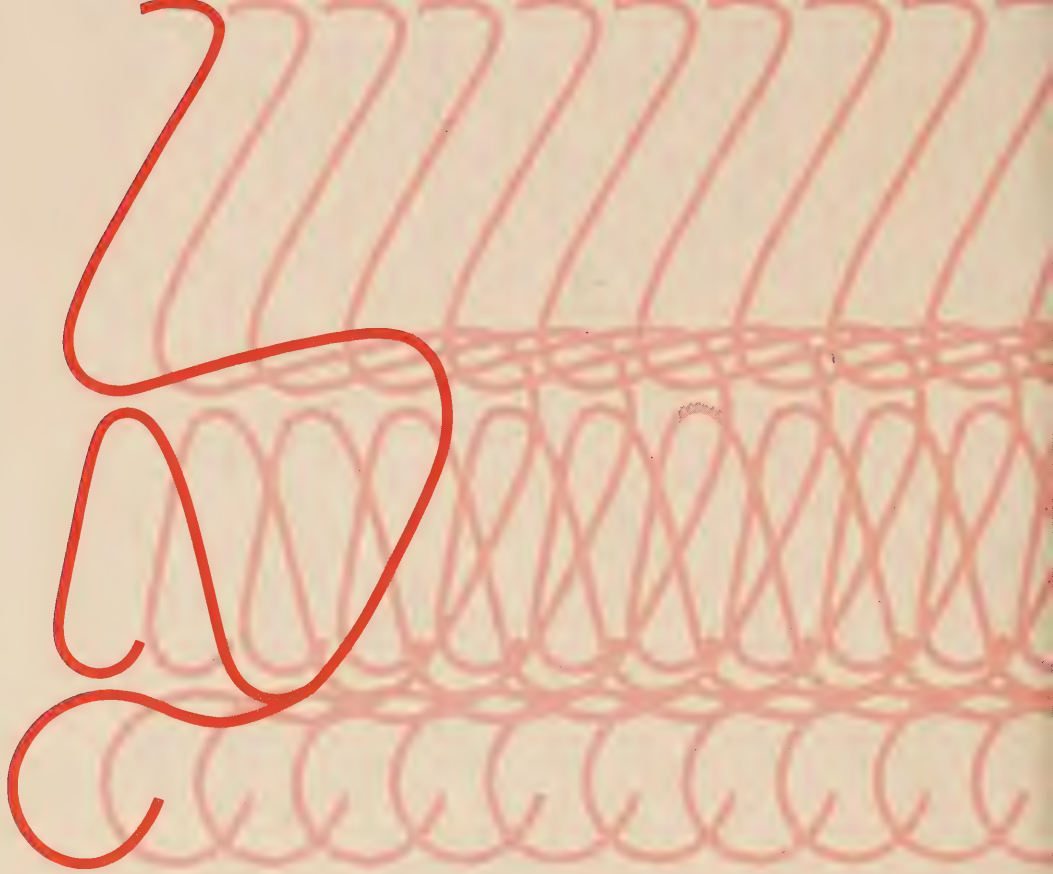
R. D. Hiscocks,
Président.

RAPPORT ANNUEL

1978

SOCIÉTÉ CANADIENNE DES BREVETS ET
D'EXPLOITATION LIMITÉE

(S C B E)



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